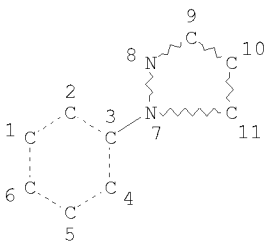
```
=> b reg
FILE 'REGISTRY' ENTERED AT 16:03:21 ON 26 DEC 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   25 DEC 2007  HIGHEST RN 959463-53-7
DICTIONARY FILE UPDATES:  25 DEC 2007  HIGHEST RN 959463-53-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> d que sta l8
L4              STR
```




```
NODE ATTRIBUTES:
CONNECT IS E3  RC AT   6
CONNECT IS E3  RC AT  11
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  11

STEREO ATTRIBUTES: NONE
L6       134263 SEA FILE=REGISTRY SSS FUL L4
L8        49433 SEA FILE=REGISTRY ABB=ON  PLU=ON  L6 AND 16.165.12/RID


=> d bib abs hitrn fhitstr l18 tot
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:n


=> b hcap
FILE 'HCAPLUS' ENTERED AT 16:04:05 ON 26 DEC 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)


Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.
The CA Lexicon is the copyrighted intellectual property of the
the American Chemical Society and is provided to assist you in searching
databases on STN.  Any dissemination, distribution, copying, or storing
```

FILE COVERS 1907 - 26 Dec 2007  VOL 147 ISS 26
FILE LAST UPDATED: 25 Dec 2007  (20071225/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> d bib abs hitrn fhitstr l18 tot

L18 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:841775 HCAPLUS
DN 141:350163
TI Preparation of arylpyrazoles as serotonin 5-HT2A and 5-HT2C receptor antagonists
IN Schiemann, Kai; Ackermann, Karl-August; Arlt, Michael; Finsinger, Dirk; Schadt, Oliver; Van Amsterdam, Christoph; Bartoszyk, Gerd; Seyfried, Christoph
PA Merck Patent GmbH, Germany
SO Ger. Offen., 102 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

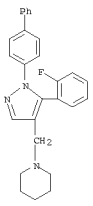
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI DE--10315572 | A1 | 20041014 | 2003DE-1015572 | 20030405 |
| AU2004228120 | A1 | 20041021 | 2004AU-0228120 | 20040308 |
| CA---2521201 | A1 | 20041021 | 2004CA-2521201 | 20040308 |
| WO2004089931 | A1 | 20041021 | 2004WO-EP02353 | 20040308 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP---1626967 | A1 | 20060222 | 2004EP-0718277 | 20040308 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK | | | | |
| BR2004009164 | A | 20060411 | 2004BR-0009164 | 20040308 |
| CN---1768051 | A | 20060503 | CN 2004-80008572 | 20040308 |
| JP2006522035 | T | 20060928 | 2006JP-0504584 | 20040308 |
| US2006264419 | A1 | 20061123 | 2005US-0552065 | 20051005 |
| PRAI 2003DE-1015572 | A | 20030405 | | |
| 2004WO-EP02353 | W | 20040308 | | |

OS MARPAT 141:350163
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Preparation of title compds. I [X = CH, N; R1 = H, halo, (CH2)nHet, etc.; R2 = (CH2)nHet, (CH2)nAr, cycloalkyl, etc.; R3, R4 = H, (CH2)nCOHet, CHO, etc.; n = 0-5; Ar = (un)substituted Ph; Het = (un)substituted monoarom., bicyclic-heterocycle] and their pharmaceutically acceptable salts were prepared For example, sodium triacetoxyborohydride meditated reductive amination of 1-methyl-piperazine and aldehyde II, e.g., prepared from 2-fluoro-4,7-dioxo-benzenebutanoic Et ester in 4-steps, afforded the dihydrochloride salt of arylpyrazole III. In 5-HT2A receptor binding assays, 167-examples of compds. I exhibited IC50 values ranging from 0.015-4.7x10-7M. Compds. I are claimed suitable as ligands of 5-HT receptors.
IT 508219-08-7P 508219-09-8P 508219-10-1P
508219-13-4P 508219-14-5P 508219-15-6P
508219-16-7P 508219-17-8P 508219-18-9P
508219-19-0P 508219-20-3P 508219-22-5P
508219-23-6P 508219-24-7P 508219-27-0P
508219-31-6P 508219-32-7P 508219-33-8P
508219-34-9P 508219-35-0P 508219-36-1P
508219-40-7P 508219-42-9P 508219-44-1P
508219-46-3P 508219-47-4P 508219-49-6P
508219-73-6P 508219-86-1P 770739-50-9P
770739-73-6P 770739-84-9P 770739-98-5P
770740-20-0P 770740-35-7P 770740-36-8P

L18 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
(prepn. of arylpyrazoles as serotonin 5-HT2A and 5-HT2C receptor antagonists)
RN 508219-08-7 HCAPLUS
CN Piperidine, 1-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)

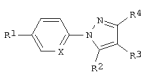


L18 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
774583-04-9P 774583-05-0P 774583-06-1P
774583-08-3P 774583-16-3P 774583-47-0P
774583-60-7P 774583-61-8P 774583-62-9P
774583-65-2P 774583-73-2P 774583-75-4P
774583-77-6P 774583-80-1P 774583-81-2P
774583-82-3P 774583-83-4P 774583-84-5P
774583-85-6P 774583-86-7P 774583-87-8P
774583-88-9P 774583-89-0P 774583-90-3P
774583-91-4P 774583-92-5P 774583-93-6P
774583-94-7P 774583-95-8P 774583-96-9P
774583-97-0P 774583-98-1P 774583-99-2P
774584-00-8P 774584-02-0P 774584-04-2P
774584-06-4P 774584-08-6P 774584-10-0P
774584-12-2P 774584-14-4P 774584-16-6P
774584-17-7P 774584-18-8P 774584-19-9P
774584-20-2P 774584-21-3P 774584-22-4P
774584-23-5P 774584-24-6P 774584-25-7P
774584-26-8P 774584-27-9P 774584-28-0P
774584-29-1P 774584-31-5P 774584-32-6P
774584-34-8P 774584-35-9P 774584-36-0P
774584-37-1P 774584-38-2P 774584-40-6P
774584-41-7P 774584-42-8P 774584-43-9P
774584-44-0P 774584-45-1P 774584-47-3P
774584-48-4P 774584-49-5P 774584-50-8P
774584-51-9P 774584-52-0P 774584-61-1P
774584-62-2P 774584-63-3P 774584-64-4P
774584-65-5P 774584-66-6P 774584-67-7P
774584-70-2P 774584-72-4P 774584-73-5P
774584-74-6P 774584-75-7P 774584-76-8P
774584-77-9P 774584-78-0P 774584-79-1P
774584-80-4P 774584-81-5P 774584-82-6P
774584-83-7P 774584-84-8P 774584-85-9P
774584-88-2P 774584-89-3P 774584-90-6P
774584-91-7P 774584-92-8P 774584-93-9P
774584-94-0P 774584-95-1P 774584-96-2P
774584-97-3P 774584-98-4P 774584-99-5P
774585-00-1P 774585-01-2P 774585-02-3P
774585-03-4P 774585-04-5P 774585-06-7P
774585-09-0P 774585-10-3P 774585-11-4P
774585-12-5P 774585-13-6P 774585-14-7P
774585-15-8P 774585-16-9P 774585-17-0P
774585-18-1P 774585-20-5P 774585-21-6P
774585-24-9P 774585-25-0P 774585-27-2P
774585-28-3P 774585-30-7P 774585-31-8P
774585-33-0P 774585-34-1P 774585-35-2P
774585-36-3P 774585-37-4P 774585-38-5P
774585-39-6P 774585-40-9P 774585-41-0P
774585-42-1P 774585-43-2P 774585-44-3P
774585-45-4P 774585-46-5P 774585-47-6P
774585-48-7P 774585-49-8P 774585-51-2P
774585-52-3P 774585-53-4P 774585-54-5P
774585-55-6P 774585-56-7P 774585-57-8P
774585-58-9P 774585-59-0P 774585-60-3P
774585-61-4P 774585-62-5P 774585-63-6P
774585-64-7P 774585-66-9P 774585-67-0P
774585-68-1P 774585-69-2P 774585-70-5P
774585-71-6P 774585-72-7P 774585-73-8P
774585-74-9P 774585-75-0P 774585-76-1P
774585-77-2P 774585-78-3P 774585-80-7P
774585-81-8P 774585-82-9P 774593-64-5P
774593-66-7P 774593-70-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of arylpyrazoles as serotonin 5-HT2A and 5-HT2C receptor antagonists)
IT 508219-08-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

L18 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:841772 HCAPLUS
DN 141:332186
TI Preparation of arylpyrazoles as serotonin 5-HT2A and/or 5-HT2C receptor antagonists.
IN Schadt, Oliver; Arlt, Michael; Finsinger, Dirk; Schiemann, Kai; Van Amsterdam, Christoph; Bartoszyk, Gerd; Seyfried, Christoph
PA Merck Patent GmbH, Germany
SO Ger. Offen., 78 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI DE--10315569 | A1 | 20041014 | 2003DE-1015569 | 20030405 |
| AU2004228124 | A1 | 20041021 | 2004AU-0228124 | 20040310 |
| CA----2521227 | A1 | 20041021 | 2004CA-2521227 | 20040310 |
| WO2004089932 | A1 | 20041021 | 2004WO-EP02453 | 20040310 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP---1611122 | A1 | 20060104 | 2004EP-0718926 | 20040310 |
| EP---1611122 | B1 | 20070613 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK | | | | |
| BR2004008986 | A | 20060328 | 2004BR-0008986 | 20040310 |
| CN---1768052 | A | 20060503 | CN 2004-80008603 | 20040310 |
| JP2006522039 | T | 20060928 | 2006JP-0504620 | 20040310 |
| AT----364601 | T | 20070715 | 2004AT-0718926 | 20040310 |
| ES----2287710 | T3 | 20071216 | 2004ES-4718926 | 20040310 |
| US2007070531 | A1 | 20070111 | 2005US-0552064 | 20051005 |
| PRAI 2003DE-1015569 | A | 20030405 | | |
| 2004WO-EP02453 | W | 20040310 | | |

OS MARPAT 141:332186
GI



I

AB Title compds. [I; R1 = H, A, halo, (CH2)nAr, cycloalkyl, CF3, NO2, cyano, C(NH)NOH, OCF3; R2 = (CH2)nHet, (CH2)nAr, cycloalkyl, CF3; R3, R4 = H, (CH2)nCO2R5, (CH2)nCOHet, CHO, (CH2)nOR5, (CH2)nHet, CH:NOA, etc.; R5 = H, A; A = alkyl, alkoxy, alkenyl, alkoxyalkyl; Ar = (substituted) Ph; Het = (aromatic) mono- or bicyclic heterocyclyl, heteroatom-containing organic residue; X = N, CH; with provisos], were prepared Thus, [1-(4'-fluorobiphen-4-yl)-5-furan-2-yl-1H-pyrazol-4-ylmethyl]methyl(1-methylpyrrolidin-3-yl)amine showed 5-HT2A activity with IC50 = 5.14E-10.
IT 508219-09-8 508219-31-6 770739-06-5
770739-07-6 770739-08-7 770739-09-8
770739-10-1 770739-11-2 770739-12-3
770739-13-4 770739-14-5 770739-15-6
770739-16-7 770739-17-8 770739-18-9
770739-19-0 770739-20-3 770739-21-4
770739-22-5 770739-23-6 770739-24-7
770739-25-8 770739-26-9 770739-27-0
770739-28-1 770739-29-2 770739-30-5
770739-31-6 770739-32-7 770739-33-8
770739-34-9 770739-35-0 770739-36-1

L18 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

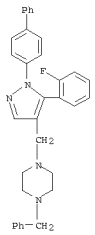
770739-37-2 770739-38-3 770739-39-4
770739-40-7 770739-41-8 770739-42-9
770739-43-0 770739-44-1 770739-45-2
770739-46-3 770739-47-4 770739-48-5
770739-49-6 770739-50-9 770739-51-0
770739-52-1 770739-53-2 770739-54-3
770739-55-4 770739-56-5 770739-57-6
770739-59-8 770739-60-1 770739-61-2
770739-63-4 770739-66-7 770739-67-8
770739-68-9 770739-69-0 770739-70-3
770739-71-4 770739-72-5 770739-73-6
770739-74-7 770739-75-8 770739-76-9
770739-77-0 770739-78-1 770739-79-2
770739-80-5 770739-81-6 770739-82-7
770739-83-8 770739-84-9 770739-85-0
770739-86-1 770739-87-2 770739-89-4
770739-90-7 770739-91-8 770739-93-0
770739-94-1 770739-95-2 770739-96-3
770739-97-4 770739-98-5 770739-99-6
770740-00-6 770740-01-7 770740-02-8
770740-03-9 770740-04-0 770740-05-1
770740-06-2 770740-07-3 770740-08-4
770740-09-5 770740-10-8 770740-11-9
770740-12-0 770740-14-2 770740-15-3
770740-16-4 770740-17-5 770740-18-6
770740-19-7 770740-20-0 770740-21-1
770740-22-2 770740-23-3 770740-24-4
770740-25-5 770740-26-6 770740-27-7
770740-28-8 770740-29-9 770740-30-2
770740-33-5 770740-34-6 770740-35-7
770740-36-8 770740-37-9 770740-38-0
770740-39-1 770740-40-4 770740-41-5
770740-42-6 770740-43-7 770740-44-8
770740-45-9 770740-46-0 770740-47-1
770740-49-3 770740-50-6 770740-52-8
770740-53-9 770740-54-0 770740-55-1
770740-56-2 770740-57-3 770740-59-5
770740-60-8 770740-61-9 770740-62-0
770740-63-1 770740-64-2 770740-65-3
770740-66-4 770740-67-5 770740-68-6
770740-69-7 770740-70-0 770740-71-1
770740-72-2 770740-73-3 771525-15-6
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of arylpyrazoles as serotonin 5-HT2A and/or 5-HT2C receptor antagonists)

IT 508219-09-8
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of arylpyrazoles as serotonin 5-HT2A and/or 5-HT2C receptor antagonists)

RN 508219-09-8 HCAPLUS

CN Piperazine, 1-[[1-(1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]-4-(phenylmethyl)- (CA INDEX NAME)

L18 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

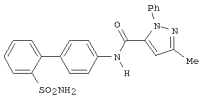


=> d bib abs hitstr l25 tot

L25 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1999:9820 HCAPLUS
DN 130:81510
TI Preparation of phenylpyrazolecarboxamides as coagulation factor Xa inhibitors
IN Galemmo, Robert Anthony, Jr.; Dominguez, Celia; Fevig, John Matthew; Han, Qi; Lam, Patrick Yuk-sun; Pinto, Donald Joseph Philip; Pruitt, James Russell; Quan, Mimi Lifen
PA The Du Pont Merck Pharmaceutical Company, USA
SO PCT Int. Appl., 259 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI WO---9857937 | A2 | 19981223 | 1998WO-US12681 | 19980618 |
| WO---9857937 | A3 | 19990318 | | |
| W: AU, BR, CA, CN, CZ, EE, HU, IL, JP, KR, LT, LV, MX, NO, NZ, PL, RO, SG, SI, SK, UA, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| ZA---9805251 | A | 19991217 | 1998ZA-0005251 | 19980617 |
| CA---2290982 | A1 | 19981223 | 1998CA-2290982 | 19980618 |
| AU---9881503 | A | 19990104 | 1998AU-0081503 | 19980618 |
| US---5998424 | A | 19991207 | 1998US-0099752 | 19980618 |
| EP----991625 | A2 | 20000412 | 1998EP-0931355 | 19980618 |
| EP----991625 | B1 | 20050601 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO | | | | |
| BR---9810151 | A | 20000808 | 1998BR-0010151 | 19980618 |
| EE----9900584 | A | 20000815 | 1998EE-0000584 | 19980618 |
| SI------20208 | A | 20001031 | 1998SI-0020043 | 19980618 |
| HU2000003906 | A2 | 20010528 | 2000HU-0003906 | 19980618 |
| JP2002507968 | T | 20020312 | 1999JP-0504786 | 19980618 |
| AT----296805 | T | 20050615 | 1998AT-0931355 | 19980618 |
| ES----2239806 | T3 | 20051001 | 1998ES-0931355 | 19980618 |
| PT----991625 | T | 20051031 | 1998PT-0931355 | 19980618 |
| US---6403620 | B1 | 20020611 | 1999US-0393782 | 19990910 |
| MX---9910588 | A | 20010910 | 1999MX-0010588 | 19991117 |
| LV-----12516 | B | 20010320 | 1999LV-0000177 | 19991216 |
| NO---9906316 | A | 19991217 | 1999NO-0006316 | 19991217 |
| LT------4702 | B | 20000925 | 1999LT-0000146 | 19991217 |
| US2003092740 | A1 | 20030515 | 2002US-0150698 | 20020516 |
| US---6602895 | B2 | 20030805 | | |
| PRAI 1997US-050219P | P | 19970619 | | |
| 1997US-0878885 | A | 19970619 | | |
| 1998US-076691P | P | 19980227 | | |
| 1998US-0099752 | A3 | 19980618 | | |
| 1998WO-US12681 | W | 19980618 | | |
| 1999US-0393782 | A3 | 19990910 | | |

OS MARPAT 130:81510
GI

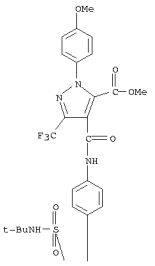


II

AB EZ1M (I; E = halo, OH, alkyl, alkoxy, etc.; M = Z2ZAB; A = (un)substituted carbocyclylene, -heterocyclylene; B = H, Y, XY; X = alkylene, CO, O, (un)substituted NH, etc.; Y = amino(alkyl), substituted carbocyclyl, -heterocyclyl, etc.; Z = bond, (heteroatom- or functional group-interrupted) alkylene, etc.; Z1 = (un)substituted Ph, Z2 = N-containing

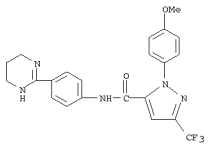
L25 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

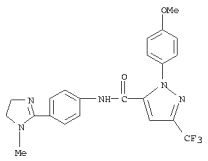


PAGE 2-A

L25 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
heteroarylene, etc.] were prepd. Thus, MeCOCH2C(:NOMe)CO2Et was cyclocondensed with PhNHNH2 and the product amidated by 4-(H2N)C6H4C6H4(SO2NHCMe3)-2 to give, after deprotection, title compd. II. Data for biol. activity of I were given.
IT 218630-96-7P 218631-00-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of phenylpyrazolecarboxamides as coagulation factor Xa inhibitors)
RN 218630-96-7 HCAPLUS
CN 1H-Pyrazole-5-carboxamide, 1-(4-methoxyphenyl)-N-[4-(1,4,5,6-tetrahydro-2-pyrimidinyl)phenyl]-3-(trifluoromethyl)- (CA INDEX NAME)

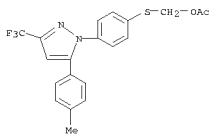


RN 218631-00-6 HCAPLUS
CN 1H-Pyrazole-5-carboxamide, N-[4-(4,5-dihydro-1-methyl-1H-imidazol-2-yl)phenyl]-1-(4-methoxyphenyl)-3-(trifluoromethyl)- (CA INDEX NAME)



IT 218631-99-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of phenylpyrazolecarboxamides as coagulation factor Xa inhibitors)
RN 218631-99-3 HCAPLUS
CN 1H-Pyrazole-5-carboxylic acid, 4-[[[2'-[[(1,1-dimethylethyl)amino]sulfonyl][1,1'-biphenyl]-4-yl]amino]carbonyl]-1-(4-methoxyphenyl)-3-(trifluoromethyl)-, methyl ester (CA INDEX NAME)

L25 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1997:297223 HCAPLUS
DN 127:33930
TI Remarkably mild and simple preparations of sulfinates, sulfonyl chlorides, and sulfonamides from thioanisoles
AU De Vleeschauwer, Marc; Gauthier, Jacques Yves
CS Medicinal Chemistry Department, Merck Frosst Center Therapeutic Research, Quebec, QC, H9R 4P8, Can.
SO Synlett (1997), (4), 375-377
CODEN: SYNLES; ISSN: 0936-5214
PB Thieme
DT Journal
LA English
OS CASREACT 127:33930
AB Two high-yielding procedures to convert thioanisoles into versatile sulfonyl chloride derivs. were developed by strategically taking advantage of the Pummerer reaction. The procedures are applicable to a broad variety of substrates, including electron-rich arenes and tolerate a wide variety of common functional groups. Considering the readily availability of thioanisoles as stable starting materials, one or the other of these procedures provides a mild, simple and versatile access to the preparation of sulfinates, sulfonyl chlorides, and sulfonamides from a common intermediate.
IT 190711-63-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of sulfonyl chlorides and sulfonamides from thioanisoles)
RN 190711-63-8 HCAPLUS
CN Methanol, [[4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]phenyl]thio]-, acetate (ester) (9CI) (CA INDEX NAME)



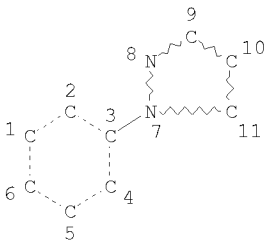
```
=> d his

     (FILE 'HOME' ENTERED AT 15:11:07 ON 26 DEC 2007)

     FILE 'HCAPLUS' ENTERED AT 15:12:53 ON 26 DEC 2007
L1            1 US20060276650/PN

     FILE 'REGISTRY' ENTERED AT 15:13:50 ON 26 DEC 2007

     FILE 'HCAPLUS' ENTERED AT 15:13:53 ON 26 DEC 2007
L2              TRA L1 1- RN :        5 TERMS

     FILE 'REGISTRY' ENTERED AT 15:13:53 ON 26 DEC 2007
L3            5 SEA L2
L4              STR
L5           50 L4
L6       134263 L4 FULL
                E PYRAZOLE/CN
L7            1 E3
L8         49433 L6 AND 16.165.12/RID

     FILE 'HCAPLUS' ENTERED AT 15:20:34 ON 26 DEC 2007
L9         12683 L8
L10         7656 L9 AND PD<=20030308
                E SCHADT O/AU
L11           23 E3-4
                E SCHIEMANN K/AU
L12           42 E3-4
                E VAN AMSTERDAM C/AU
L13           53 E3-6
                E BARTOSZYK G/AU
L14          122 E3-8
                E SEYFRIED C/AU
L15          230 E3-6,E12-14

     FILE 'HCAPLUS' ENTERED AT 15:23:47 ON 26 DEC 2007
L16        34802 MERCK/CS,PA
L17          120 L9 AND L11-16
L18            2 L9 AND L11-15
L19          118 L17 NOT L18
L20        12681 L9 NOT L18
L21           69 L19 AND L10
                SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 15:27:04 ON 26 DEC 2007
L22          538 E1-538
                DEL SEL Y
L23            5 L22 AND (C30H29F3N4O6S OR C22H20F3N5O2 OR C28H21F4N5O2 OR C20H1
                SEL RN 2-5
L24            4 E1-4 AND L23

     FILE 'HCAPLUS' ENTERED AT 15:50:09 ON 26 DEC 2007
L25            2 L24

=> b reg
FILE 'REGISTRY' ENTERED AT 15:30:20 ON 27 DEC 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   26 DEC 2007  HIGHEST RN 959588-76-2
DICTIONARY FILE UPDATES:  26 DEC 2007  HIGHEST RN 959588-76-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007
```

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> d que sta l2
L1 STR



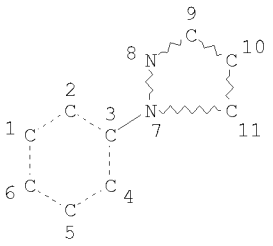
NODE ATTRIBUTES:
CONNECT IS E3 RC AT 6
CONNECT IS E3 RC AT 11
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE
L2 134263 SEA FILE=REGISTRY SSS FUL L1

100.0% PROCESSED 423477 ITERATIONS 134263 ANSWERS
SEARCH TIME: 00.00.02

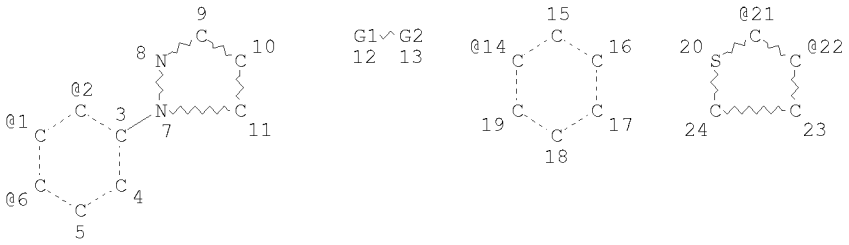
=> d que sta l5
L1 STR



NODE ATTRIBUTES:
CONNECT IS E3 RC AT 6
CONNECT IS E3 RC AT 11
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE
L2 134263 SEA FILE=REGISTRY SSS FUL L1
L3 STR



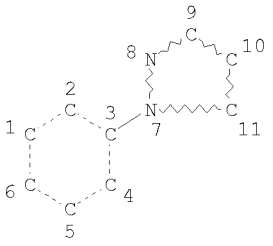

VAR G1=2/1/6
VAR G2=14/21/22
NODE ATTRIBUTES:
CONNECT IS E3 RC AT 6
CONNECT IS E3 RC AT 11
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE
L5 882 SEA FILE=REGISTRY SUB=L2 SSS FUL L3

100.0% PROCESSED 134263 ITERATIONS 882 ANSWERS
SEARCH TIME: 00.00.01

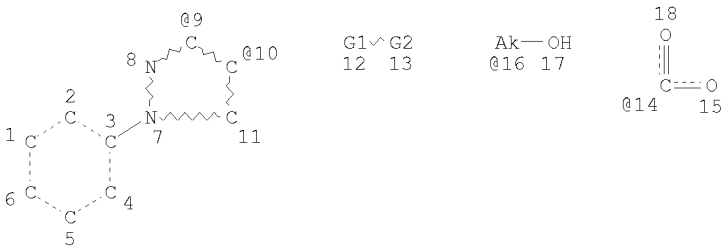
=> d que sta l34
L1 STR




NODE ATTRIBUTES:
CONNECT IS E3 RC AT 6
CONNECT IS E3 RC AT 11
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE
L2 134263 SEA FILE=REGISTRY SSS FUL L1
L32 STR




VAR G1=9/10
VAR G2=14/16/CHO
NODE ATTRIBUTES:
CONNECT IS E3 RC AT 6
CONNECT IS E3 RC AT 11
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 18

STEREO ATTRIBUTES: NONE
L34 8106 SEA FILE=REGISTRY SUB=L2 SSS FUL L32

100.0% PROCESSED 123705 ITERATIONS 8106 ANSWERS
SEARCH TIME: 00.00.01

=> b hcap
FILE 'HCAPLUS' ENTERED AT 15:30:55 ON 27 DEC 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.


FILE COVERS 1907 - 27 Dec 2007 VOL 147 ISS 26
FILE LAST UPDATED: 26 Dec 2007 (20071226/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> d bib abs hitrn fhitstr l13 tot

L13 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:841775 HCAPLUS
DN 141:350163
TI Preparation of arylpyrazoles as serotonin 5-HT2A and 5-HT2C receptor antagonists
IN Schiemann, Kai; Ackermann, Karl-August; Arlt, Michael; Finsinger, Dirk; Schadt, Oliver; Van Amsterdam, Christoph; Bartoszyk, Gerd; Seyfried, Christoph
PA Merck Patent GmbH, Germany
SO Ger. Offen., 102 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

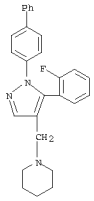
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI DE--10315572 | A1 | 20041014 | 2003DE-1015572 | 20030405 |
| AU2004228120 | A1 | 20041021 | 2004AU-0228120 | 20040308 |
| CA---2521201 | A1 | 20041021 | 2004CA-2521201 | 20040308 |
| WO2004089931 | A1 | 20041021 | 2004WO-EP02353 | 20040308 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP---1626967 | A1 | 20060222 | 2004EP-0718277 | 20040308 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK | | | | |
| BR2004009164 | A | 20060411 | 2004BR-0009164 | 20040308 |
| CN---1768051 | A | 20060503 | CN 2004-80008572 | 20040308 |
| JP2006522035 | T | 20060928 | 2006JP-0504584 | 20040308 |
| US2006264419 | A1 | 20061123 | 2005US-0552065 | 20051005 |
| PRAI 2003DE-1015572 | A | 20030405 | | |
| 2004WO-EP02353 | W | 20040308 | | |

OS MARPAT 141:350163
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Preparation of title compds. I [X = CH, N; R1 = H, halo, (CH2)nHet, etc.; R2 = (CH2)nHet, (CH2)nAr, cycloalkyl, etc.; R3, R4 = H, (CH2)nCOHet, CHO, etc.; n = 0-5; Ar = (un)substituted Ph; Het = (un)substituted monoarom., bicyclic-heterocycle] and their pharmaceutically acceptable salts were prepared For example, sodium triacetoxyborohydride meditated reductive amination of 1-methyl-piperazine and aldehyde II, e.g., prepared from 2-fluoro-4,7-dioxo-benzenebutanoic Et ester in 4-steps, afforded the dihydrochloride salt of arylpyrazole III. In 5-HT2A receptor binding assays, 167-examples of compds. I exhibited IC50 values ranging from 0.015-4.7x10-7M. Compds. I are claimed suitable as ligands of 5-HT receptors.
IT 508219-08-7P 508219-09-8P 508219-10-1P
508219-13-4P 508219-14-5P 508219-15-6P
508219-16-7P 508219-17-8P 508219-18-9P
508219-19-0P 508219-20-3P 508219-22-5P
508219-23-6P 508219-24-7P 508219-27-0P
508219-31-6P 508219-32-7P 508219-33-8P
508219-34-9P 508219-35-0P 508219-36-1P
508219-40-7P 508219-42-9P 508219-44-1P
508219-46-3P 508219-47-4P 508219-49-6P
508219-73-6P 508219-86-1P 770739-50-9P
770739-73-6P 770739-84-9P 770739-98-5P
770740-20-0P 770740-35-7P 774583-04-9P

L13 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
yl]methyl]- (CA INDEX NAME)

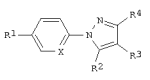



L13 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
774583-05-0P 774583-06-1P 774583-08-3P
774583-16-3P 774583-47-0P 774583-60-7P
774583-61-8P 774583-62-9P 774583-65-2P
774583-73-2P 774583-75-4P 774583-77-6P
774583-80-1P 774583-81-2P 774583-82-3P
774583-83-4P 774583-84-5P 774583-85-6P
774583-86-7P 774583-87-8P 774583-88-9P
774583-89-0P 774583-90-3P 774583-91-4P
774583-92-5P 774583-93-6P 774583-94-7P
774583-95-8P 774583-96-9P 774584-02-0P
774584-04-2P 774584-06-4P 774584-08-6P
774584-10-0P 774584-12-2P 774584-14-4P
774584-16-6P 774584-17-7P 774584-18-8P
774584-19-9P 774584-20-2P 774584-22-4P
774584-23-5P 774584-24-6P 774584-25-7P
774584-26-8P 774584-27-9P 774584-31-5P
774584-32-6P 774584-35-9P 774584-36-0P
774584-37-1P 774584-38-2P 774584-40-6P
774584-41-7P 774584-42-8P 774584-43-9P
774584-44-0P 774584-45-1P 774584-47-3P
774584-48-4P 774584-49-5P 774584-50-8P
774584-51-9P 774584-52-0P 774584-61-1P
774584-62-2P 774584-63-3P 774584-64-4P
774584-65-5P 774584-66-6P 774584-67-7P
774584-70-2P 774584-72-4P 774584-73-5P
774584-74-6P 774584-75-7P 774584-76-8P
774584-77-9P 774584-78-0P 774584-79-1P
774584-80-4P 774584-81-5P 774584-82-6P
774584-83-7P 774584-84-8P 774584-85-9P
774584-88-2P 774584-89-3P 774584-90-6P
774584-91-7P 774584-92-8P 774584-93-9P
774584-94-0P 774584-95-1P 774584-96-2P
774584-97-3P 774584-98-4P 774584-99-5P
774585-00-1P 774585-01-2P 774585-02-3P
774585-03-4P 774585-04-5P 774585-06-7P
774585-09-0P 774585-10-3P 774585-11-4P
774585-12-5P 774585-13-6P 774585-14-7P
774585-15-8P 774585-16-9P 774585-17-0P
774585-18-1P 774585-20-5P 774585-21-6P
774585-24-9P 774585-25-0P 774585-27-2P
774585-28-3P 774585-30-7P 774585-31-8P
774585-33-0P 774585-34-1P 774585-35-2P
774585-36-3P 774585-37-4P 774585-38-5P
774585-39-6P 774585-40-9P 774585-41-0P
774585-42-1P 774585-43-2P 774585-44-3P
774585-45-4P 774585-46-5P 774585-47-6P
774585-48-7P 774585-49-8P 774585-51-2P
774585-52-3P 774585-53-4P 774585-55-6P
774585-56-7P 774585-57-8P 774585-58-9P
774585-59-0P 774585-60-3P 774585-61-4P
774585-62-5P 774585-63-6P 774585-64-7P
774585-66-9P 774585-67-0P 774585-68-1P
774585-69-2P 774585-70-5P 774585-71-6P
774585-73-8P 774585-74-9P 774585-75-0P
774585-76-1P 774585-77-2P 774585-78-3P
774585-80-7P 774585-81-8P 774585-82-9P
774593-64-5P 774593-66-7P 774593-70-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of arylpyrazoles as serotonin 5-HT2A and 5-HT2C receptor antagonists)
IT 508219-08-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of arylpyrazoles as serotonin 5-HT2A and 5-HT2C receptor antagonists)
RN 508219-08-7 HCAPLUS
CN Piperidine, 1-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-

L13 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:841772 HCAPLUS
DN 141:332186
TI Preparation of arylpyrazoles as serotonin 5-HT2A and/or 5-HT2C receptor antagonists.
IN Schadt, Oliver; Arlt, Michael; Finsinger, Dirk; Schiemann, Kai; Van Amsterdam, Christoph; Bartoszyk, Gerd; Seyfried, Christoph
PA Merck Patent GmbH, Germany
SO Ger. Offen., 78 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI DE--10315569 | A1 | 20041014 | 2003DE-1015569 | 20030405 |
| AU2004228124 | A1 | 20041021 | 2004AU-0228124 | 20040310 |
| CA----2521227 | A1 | 20041021 | 2004CA-2521227 | 20040310 |
| WO2004089932 | A1 | 20041021 | 2004WO-EP02453 | 20040310 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP---1611122 | A1 | 20060104 | 2004EP-0718926 | 20040310 |
| EP---1611122 | B1 | 20070613 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LI, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK | | | | |
| BR2004008986 | A | 20060328 | 2004BR-0008986 | 20040310 |
| CN---1768052 | A | 20060503 | CN 2004-80008603 | 20040310 |
| JP2006522039 | T | 20060928 | 2006JP-0504620 | 20040310 |
| AT----364601 | T | 20070715 | 2004AT-0718926 | 20040310 |
| ES----2287710 | T3 | 20071216 | 2004ES-4718926 | 20040310 |
| US2007010531 | A1 | 20070111 | 2005US-0552064 | 20051005 |
| PRAI 2003DE-1015569 | A | 20030405 | | |
| 2004WO-EP02453 | W | 20040310 | | |

OS MARPAT 141:332186
GI



I

AB Title compds. [I; R1 = H, A, halo, (CH2)nAr, cycloalkyl, CF3, NO2, cyano, C(NH)NOH, OCF3; R2 = (CH2)nHet, (CH2)nAr, cycloalkyl, CF3; R3, R4 = H, (CH2)nCO2R5, (CH2)nCOHet, CHO, (CH2)nOR5, (CH2)nHet, CH:NOA, etc.; R5 = H, A; A = alkyl, alkoxy, alkenyl, alkoxyalkyl; Ar = (substituted) Ph; Het = (aromatic) mono- or bicyclic heterocyclyl, heteroatom-containing organic residue; X = N, CH; with provisos], were prepared Thus, [1-(4'-fluorobiphen-4-yl)-5-furan-2-yl-1H-pyrazol-4-ylmethyl]methyl(1-methylpyrrolidin-3-yl)amine showed 5-HT2A activity with IC50 = 5.14E-10.
IT 508219-09-8 508219-31-6 770739-06-5
770739-07-6 770739-08-7 770739-09-8
770739-10-1 770739-11-2 770739-12-3
770739-13-4 770739-14-5 770739-15-6
770739-16-7 770739-17-8 770739-18-9
770739-19-0 770739-20-3 770739-21-4
770739-22-5 770739-23-6 770739-24-7
770739-25-8 770739-26-9 770739-27-0
770739-28-1 770739-29-2 770739-30-5
770739-31-6 770739-32-7 770739-33-8
770739-34-9 770739-35-0 770739-36-1

L13 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

770739-37-2 770739-38-3 770739-39-4
770739-40-7 770739-41-8 770739-42-9
770739-43-0 770739-44-1 770739-45-2
770739-46-3 770739-47-4 770739-48-5
770739-49-6 770739-50-9 770739-51-0
770739-52-1 770739-53-2 770739-54-3
770739-55-4 770739-56-5 770739-57-6
770739-59-8 770739-60-1 770739-61-2
770739-63-4 770739-66-7 770739-67-8
770739-68-9 770739-69-0 770739-70-3
770739-71-4 770739-72-5 770739-73-6
770739-74-7 770739-75-8 770739-76-9
770739-77-0 770739-78-1 770739-79-2
770739-80-5 770739-81-6 770739-82-7
770739-83-8 770739-84-9 770739-85-0
770739-86-1 770739-87-2 770739-89-4
770739-90-7 770739-91-8 770739-93-0
770739-94-1 770739-95-2 770739-96-3
770739-97-4 770739-98-5 770739-99-6
770740-00-6 770740-01-7 770740-02-8
770740-03-9 770740-04-0 770740-05-1
770740-06-2 770740-07-3 770740-08-4
770740-09-5 770740-10-8 770740-11-9
770740-12-0 770740-14-2 770740-15-3
770740-17-5 770740-18-6 770740-19-7
770740-20-0 770740-22-2 770740-23-3
770740-24-4 770740-25-5 770740-27-7
770740-28-8 770740-29-9 770740-30-2
770740-33-5 770740-34-6 770740-35-7
770740-37-9 770740-38-0 770740-39-1
770740-40-4 770740-41-5 770740-42-6
770740-43-7 770740-44-8 770740-45-9
770740-46-0 770740-47-1 770740-49-3
770740-50-6 770740-52-8 770740-53-9
770740-54-0 770740-55-1 770740-56-2
770740-57-3 770740-59-5 770740-60-8
770740-61-9 770740-62-0 770740-63-1
770740-64-2 770740-65-3 770740-66-4
770740-67-5 770740-68-6 770740-69-7
770740-70-0 770740-71-1 770740-72-2
770740-73-3 771525-15-6

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of arylpyrazoles as serotonin 5-HT2A and/or 5-HT2C receptor antagonists)

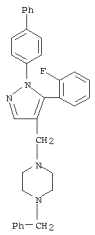
IT 508219-09-8

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of arylpyrazoles as serotonin 5-HT2A and/or 5-HT2C receptor antagonists)

RN 508219-09-8 HCAPLUS

CN Piperazine, 1-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]-4-(phenylmethyl)- (CA INDEX NAME)

L13 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



=> d bib abs hitstr l15 tot

L15 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:902356 HCAPLUS

DN 141:379921

TI Biaryl-substituted pyrazoles as sodium channel blockers, and their preparation, pharmaceutical compositions, and use in the treatment of pain

IN Chakravarty, Prasun K.; Fisher, Michael H.; Parsons, William H.; Tyagarajan, Sriram; Zhou, Bishan

PA Merck & Co., Inc., USA

SO PCT Int. Appl., 104 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

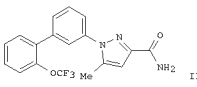
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI WO2004092140 | A1 | 20041028 | 2004WO-US09713 | 20040330 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NG, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU2004230854 | A1 | 20041028 | 2004AU-0230854 | 20040330 |
| CA---2520804 | A1 | 20041028 | 2004CA-2520804 | 20040330 |
| EP---1615895 | A1 | 20060118 | 2004EP-0759062 | 20040330 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK | | | | |
| CN---1798738 | A | 20060705 | CN 2004-80014916 | 20040330 |
| JP2006522130 | T | 20060928 | 2006JP-0509477 | 20040330 |
| IN2005DN04296 | A | 20070831 | 2005IN-DN04296 | 20050922 |
| US2006183785 | A1 | 20060817 | 2005US-0552024 | 20051003 |

PRAI 2003US-460106P P 20030403

2004WO-US09713 W 20040330

OS MARPAT 141:379921

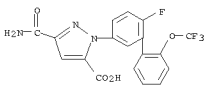
GI



II

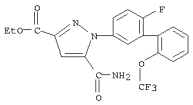
AB Biaryl-substituted pyrazole compds., which are sodium channel blockers, useful for the treatment of pain and other conditions, are disclosed. The compds. generally conform to the structure Ar1-Ar2-Ar3 [I; Ar1 = Ph with 0-3 selected substituents, typically H, Cl, CF3, OCF3, etc.; Ar2 = 1,3-phenylene, 3,5-, 2,4-, 2,6-, or 4,2-pyridinediyl, or 2,6-pyrazinediyl, all with 0-2 selected substituents, typically H, F, OCF3; Ar3 = pyrazol-1-yl or pyrazol-3(5)-yl, with 0-3 selected substituents, typically H, CO2H, CONH2, CO2Me, CO2Et, Me, etc.; including pharmaceutically acceptable salts]. Pharmaceutical compns. comprise an effective amount of I, either alone, or in combination with one or more therapeutically active compds., and a pharmaceutically acceptable carrier. Methods of treatment of conditions, including acute pain, chronic pain, visceral pain, inflammatory pain, and neuropathic pain, comprise administering an effective amount of I, either alone, or in combination with one or more therapeutically active compds. I displayed sodium channel blocking activity at concns. ranging from about <0.1 μM to about <50 μM in several described in vitro assays, e.g., in an electrophysiol. assay using an HEK-293 cell line stably expressing the PN1 sodium channel subtype. Approx 300 specific invention compds. were prepared and listed individually

L15 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



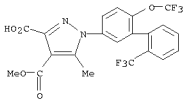
RN 784142-09-2 HCAPLUS

CN 1H-Pyrazole-3-carboxylic acid, 5-(aminocarbonyl)-1-[6-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-, ethyl ester (CA INDEX NAME)



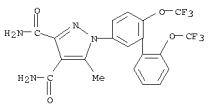
RN 784142-20-7 HCAPLUS

CN 1H-Pyrazole-3,4-dicarboxylic acid, 5-methyl-1-[6-(trifluoromethoxy)-2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-, 4-methyl ester (CA INDEX NAME)



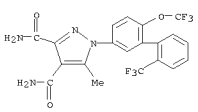
RN 784142-21-8 HCAPLUS

CN 1H-Pyrazole-3,4-dicarboxamide, 1-[2',6-bis(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-5-methyl- (CA INDEX NAME)



RN 784142-22-9 HCAPLUS

CN 1H-Pyrazole-3,4-dicarboxamide, 5-methyl-1-[6-(trifluoromethoxy)-2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)



RN 784142-23-0 HCAPLUS

L15 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

in examples and/or claims. Several prepns. are described in detail. For instance, invention compd. II was prepd in 4 steps. Thus, cyclocondensation of 3-BrC6H4NHNH2.HCl with Et 2,4-dioxovalerate in refluxing AcOH gave 84% Et 1-(3-bromophenyl)-5-methyl-1H-pyrazole-3-carboxylate. Alk. hydrolysis of this ester with 2N NaOH gave 89% of the corresponding acid, which was activated with 1,1-carbonyldiimidazole and amidated with NH4OAc to give 82% 1-(3-bromophenyl)-5-methyl-1H-pyrazole-3-carboxamide. Suzuki coupling of this bromide with 2-CF3OC6H4B(OH)2 (prepn. given) gave 88% II.

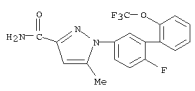
IT 784141-65-7P, 1-[6-Fluoro-2'-(trifluoromethoxy)-1,1'-biphenyl-3-yl]-5-methyl-1H-pyrazole-3-carboxamide 784141-99-7P 784142-07-0P 784142-08-1P 784142-09-2P 784142-20-7P 784142-21-8P 784142-22-9P 784142-23-0P 784142-24-1P 784142-25-2P 784142-26-3P 784142-27-4P 784142-28-5P 784142-29-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of biaryl-substituted pyrazoles as sodium channel blockers, particularly as analgesics)

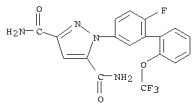
RN 784141-65-7 HCAPLUS

CN 1H-Pyrazole-3-carboxamide, 1-[6-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-5-methyl- (CA INDEX NAME)



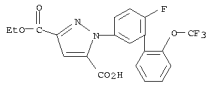
RN 784141-99-7 HCAPLUS

CN 1H-Pyrazole-3,5-dicarboxamide, 1-[6-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)



RN 784142-07-0 HCAPLUS

CN 1H-Pyrazole-3,5-dicarboxylic acid, 1-[6-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-, 3-ethyl ester (CA INDEX NAME)

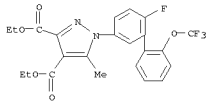


RN 784142-08-1 HCAPLUS

CN 1H-Pyrazole-5-carboxylic acid, 3-(aminocarbonyl)-1-[6-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

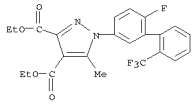
L15 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CN 1H-Pyrazole-3,4-dicarboxylic acid, 1-[6-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-5-methyl-, diethyl ester (9CI) (CA INDEX NAME)



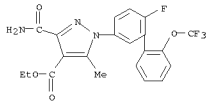
RN 784142-24-1 HCAPLUS

CN 1H-Pyrazole-3,4-dicarboxylic acid, 1-[6-fluoro-2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-5-methyl-, diethyl ester (9CI) (CA INDEX NAME)



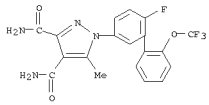
RN 784142-25-2 HCAPLUS

CN 1H-Pyrazole-4-carboxylic acid, 3-(aminocarbonyl)-1-[6-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-5-methyl-, ethyl ester (CA INDEX NAME)



RN 784142-26-3 HCAPLUS

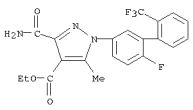
CN 1H-Pyrazole-3,4-dicarboxamide, 1-[6-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-5-methyl- (CA INDEX NAME)



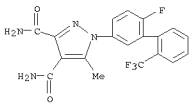
RN 784142-27-4 HCAPLUS

CN 1H-Pyrazole-4-carboxylic acid, 3-(aminocarbonyl)-1-[6-fluoro-2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-5-methyl-, ethyl ester (CA INDEX NAME)

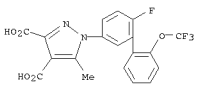
L15 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 784142-28-5 HCAPLUS
CN 1H-Pyrazole-3,4-dicarboxamide, 1-[6-fluoro-2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-5-methyl- (CA INDEX NAME)



RN 784142-29-6 HCAPLUS
CN 1H-Pyrazole-3,4-dicarboxylic acid, 1-[6-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-5-methyl- (CA INDEX NAME)

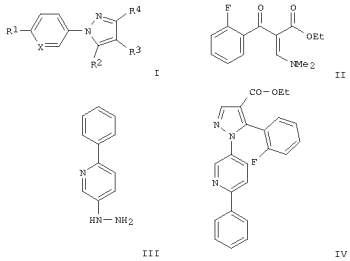


RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2003:279562 HCAPLUS
DN 138:304276
TI Preparation of pyrazoles as glycine transporter protein inhibitors for the treatment of neurodegenerative diseases
PA Merck Patent G.m.b.H., Germany; Yamanouchi Pharmaceutical Co.
SO Ger. Offen., 62 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

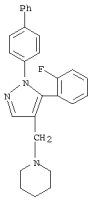
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| DE--10149370 | A1 | 20030410 | 2001DE-1049370 | 20011006 |
| WO2003031435 | A1 | 20030417 | 2002WO-EP10172 | 20020911 |
| WO2003031435 | A8 | 20030515 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU2002342675 | A1 | 20030422 | 2002AU-0342675 | 20020911 |
| PRAI 2001DE-1049370 | A | 20011006 | | |
| 2002WO-EP10172 | W | 20020911 | | |

OS MARPAT 138:304276
GI



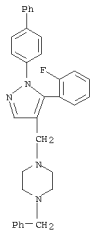
AB Title compds. I [X = CH, N; R1 = H, A, halo, etc.; R2 = Ph, p-chlorophenyl; R3, R4 = H, (CH2)nCO2R5, CHO, etc.; R5 = H, A; A = alkyl, alkenyl, alkoxyalkyl, etc.; n = 0-5] and their pharmaceutically acceptable salts were prepared For example, condensation of enamine II e.g., prepared from 1,1-dimethoxy-N,N-dimethylmethanamine and 2-fluoro-β-oxo-benzenepropanoic acid Et ester, and aryl hydrazine III, e.g., prepared from 2-chloro-5-nitropyridine in 3-steps, provided pyrazole IV (no yield provided). In glycine transporter protein inhibition studies, approx. 71-examples of compds. I exhibited IC50 values ranging from 0.15 - 8.7 μM, e.g., the IC50 value of pyrazole IV = 2.5 μM. Compds. I are

L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
claimed useful for the treatment of schizophrenia, depression, dementia, etc.
IT 508219-08-7P 508219-09-8P 508219-10-1P
508219-11-2P 508219-12-3P 508219-13-4P
508219-14-5P 508219-15-6P, 1-Biphenyl-4-yl-4-(2,5-dihydropyrrol-1-ylmethyl)-5-(2-fluorophenyl)-1H-pyrazol
508219-16-7P 508219-17-8P 508219-18-9P
508219-19-0P 508219-20-3P 508219-21-4P
508219-22-5P 508219-23-6P 508219-24-7P
508219-25-8P 508219-26-9P 508219-27-0P
508219-28-1P, 3-[1-Biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]acrylic acid 508219-29-2P, 3-[1-Biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]acrylic acid ethyl ester
508219-30-5P, 3-[1-Biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]prop-2-en-1-ol 508219-31-6P, 4-[2-[1-Biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]-ethyl]morpholine 508219-32-7P
508219-33-8P 508219-34-9P 508219-35-0P,
4-[3-[1-Biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]-allyl]morpholine
508219-36-1P 508219-37-2P 508219-38-3P
508219-39-4P 508219-40-7P 508219-41-8P
508219-42-9P 508219-43-0P 508219-44-1P,
1-[1-Biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]-1-(4-methyl-piperazin-1-yl)methanone 508219-45-2P 508219-46-3P
508219-47-4P 508219-48-5P 508219-49-6P
508219-51-0P 508219-52-1P 508219-53-2P
508219-54-3P 508219-55-4P 508219-56-5P
508219-57-6P 508219-58-7P 508219-59-8P
508219-60-1P 508219-61-2P 508219-62-3P
508219-63-4P 508219-64-5P 508219-65-6P
508219-66-7P 508219-68-9P 508219-69-0P
508219-70-3P 508219-71-4P 508219-72-5P
508219-73-6P 508219-74-7P 508219-75-8P
508219-86-1P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of pyrazoles as glycine transporter protein inhibitors for the treatment of neurodegenerative diseases)
RN 508219-08-7 HCAPLUS
CN Piperidine, 1-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)

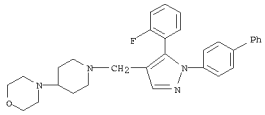


RN 508219-09-8 HCAPLUS
CN Piperazine, 1-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]-4-(phenylmethyl)- (CA INDEX NAME)

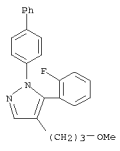
L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 508219-10-1 HCAPLUS
CN Morpholine, 4-[1-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]-4-piperidinyl]- (CA INDEX NAME)

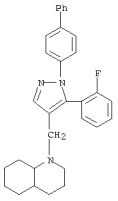


RN 508219-11-2 HCAPLUS
CN 1H-Pyrazole, 1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-4-(3-methoxypropyl)- (CA INDEX NAME)

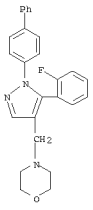


RN 508219-12-3 HCAPLUS
CN Quinoline, 1-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]decahydro- (CA INDEX NAME)

L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

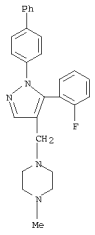


RN 508219-13-4 HCAPLUS
CN Morpholine, 4-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)

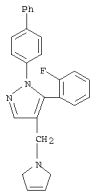


RN 508219-14-5 HCAPLUS
CN Piperazine, 1-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]-4-methyl- (CA INDEX NAME)

L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

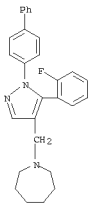


RN 508219-15-6 HCAPLUS
CN 1H-Pyrazole, 1-[1,1'-biphenyl]-4-yl-4-[(2,5-dihydro-1H-pyrrol-1-yl)methyl]-5-(2-fluorophenyl)- (CA INDEX NAME)

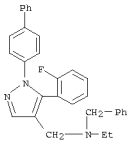


RN 508219-16-7 HCAPLUS
CN 1H-Azepine, 1-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]hexahydro- (CA INDEX NAME)

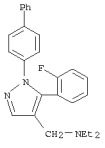
L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 508219-17-8 HCAPLUS
CN 1H-Pyrazole-4-methanamine, 1-[1,1'-biphenyl]-4-yl-N-ethyl-5-(2-fluorophenyl)-N-(phenylmethyl)- (CA INDEX NAME)

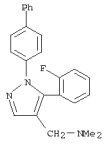


RN 508219-18-9 HCAPLUS
CN 1H-Pyrazole-4-methanamine, 1-[1,1'-biphenyl]-4-yl-N,N-diethyl-5-(2-fluorophenyl)- (CA INDEX NAME)

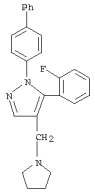


RN 508219-19-0 HCAPLUS
CN 1H-Pyrazole-4-methanamine, 1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-N,N-dimethyl- (CA INDEX NAME)

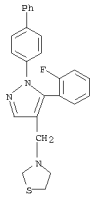
L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 508219-20-3 HCAPLUS
CN 1H-Pyrazole, 1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-4-(1-pyrrolidinylmethyl)- (CA INDEX NAME)

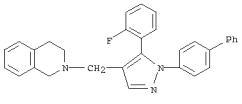


RN 508219-21-4 HCAPLUS
CN Thiazolidine, 3-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)

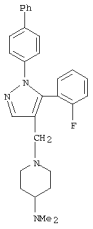


RN 508219-22-5 HCAPLUS
CN Isoquinoline, 2-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]-1,2,3,4-tetrahydro- (CA INDEX NAME)

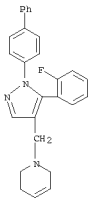
L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 508219-23-6 HCAPLUS
CN 4-Piperidinamine, 1-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]-N,N-dimethyl- (CA INDEX NAME)

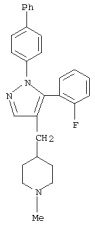


RN 508219-24-7 HCAPLUS
CN Pyridine, 1-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]-1,2,3,6-tetrahydro- (CA INDEX NAME)

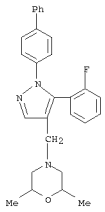


RN 508219-25-8 HCAPLUS
CN Piperidine, 4-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]-1-methyl- (CA INDEX NAME)

L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

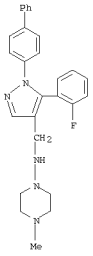


RN 508219-26-9 HCAPLUS
CN Morpholine, 4-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]-2,6-dimethyl- (CA INDEX NAME)

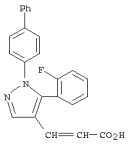


RN 508219-27-0 HCAPLUS
CN 1-Piperazinamine, N-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]-4-methyl- (CA INDEX NAME)

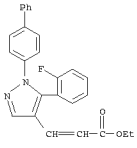
L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 508219-28-1 HCAPLUS
CN 2-Propenoic acid, 3-[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]- (CA INDEX NAME)

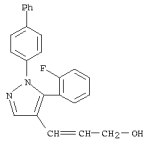


RN 508219-29-2 HCAPLUS
CN 2-Propenoic acid, 3-[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]-, ethyl ester (CA INDEX NAME)

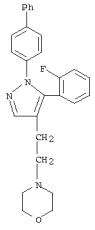


RN 508219-30-5 HCAPLUS
CN 2-Propen-1-ol, 3-[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]- (CA INDEX NAME)

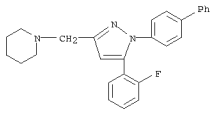
L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 508219-31-6 HCAPLUS
CN Morpholine, 4-[2-[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]ethyl]- (CA INDEX NAME)

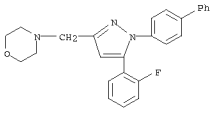


RN 508219-32-7 HCAPLUS
CN Piperidine, 1-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-3-yl]methyl]- (CA INDEX NAME)

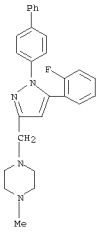


RN 508219-33-8 HCAPLUS
CN Morpholine, 4-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-3-yl]methyl]- (CA INDEX NAME)

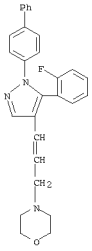
L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 508219-34-9 HCAPLUS
CN Piperazine, 1-[[1-(1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-3-yl]methyl]-4-methyl- (CA INDEX NAME)

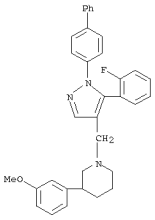


RN 508219-35-0 HCAPLUS
CN Morpholine, 4-[3-[1-(1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]-2-propenyl]- (9CI) (CA INDEX NAME)

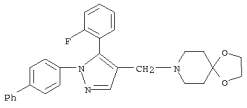


RN 508219-36-1 HCAPLUS

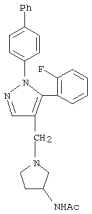
L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 508219-39-4 HCAPLUS
CN 1,4-Dioxa-8-azaspiro[4.5]decane, 8-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl]-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)

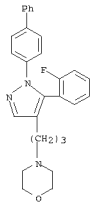


RN 508219-40-7 HCAPLUS
CN Acetamide, N-[1-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]-3-pyrrolidinyl]- (CA INDEX NAME)



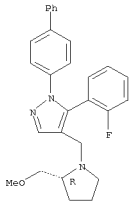
RN 508219-41-8 HCAPLUS
CN Piperidine, 1-[[1-(1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]-2-methyl- (CA INDEX NAME)

L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN Morpholine, 4-[3-[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]propyl]- (CA INDEX NAME)



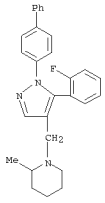
RN 508219-37-2 HCAPLUS
CN 1H-Pyrazole, 1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-4-[[(2R)-2-(methoxymethyl)-1-pyrrolidinyl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

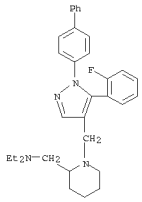


RN 508219-38-3 HCAPLUS
CN Piperidine, 1-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]-3-(3-methoxyphenyl)- (CA INDEX NAME)

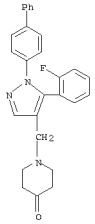
L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 508219-42-9 HCAPLUS
CN 2-Piperidinemethanamine, 1-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]-N,N-diethyl- (CA INDEX NAME)

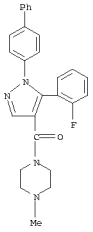


RN 508219-43-0 HCAPLUS
CN 4-Piperidinone, 1-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)



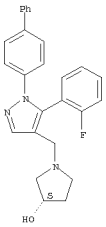
RN 508219-44-1 HCAPLUS
CN Piperazine, 1-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]carbonyl]-4-methyl- (9CI) (CA INDEX NAME)

L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



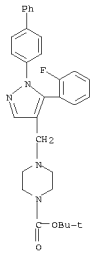
RN 508219-45-2 HCAPLUS
CN 3-Pyrrolidinol, 1-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]-, (3S)- (CA INDEX NAME)

Absolute stereochemistry.

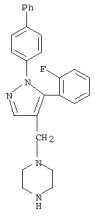


RN 508219-46-3 HCAPLUS
CN 1-Piperazinecarboxylic acid, 4-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

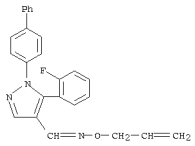
L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 508219-47-4 HCAPLUS
CN Piperazine, 1-[[1-[3,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)

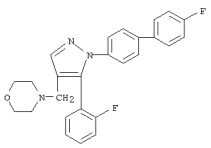


RN 508219-48-5 HCAPLUS
CN 1H-Pyrazole-4-carboxaldehyde, 1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-, O-2-propenyloxime (9CI) (CA INDEX NAME)

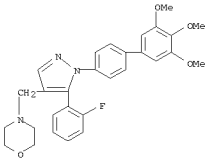


L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

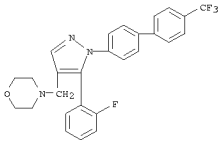
RN 508219-49-6 HCAPLUS
CN Morpholine, 4-[[1-(4'-fluoro[1,1'-biphenyl]-4-yl)-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)



RN 508219-51-0 HCAPLUS
CN Morpholine, 4-[[5-(2-fluorophenyl)-1-(3',4',5'-trimethoxy[1,1'-biphenyl]-4-yl)-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)

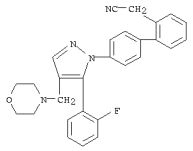


RN 508219-52-1 HCAPLUS
CN Morpholine, 4-[[5-(2-fluorophenyl)-1-[4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)

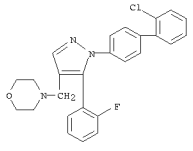


RN 508219-53-2 HCAPLUS
CN [1,1'-Biphenyl]-2-acetonitrile, 4'-[5-(2-fluorophenyl)-4-(4-morpholinylmethyl)-1H-pyrazol-1-yl]- (CA INDEX NAME)

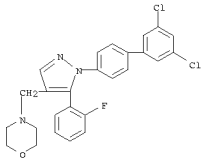
L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 508219-54-3 HCAPLUS
CN Morpholine, 4-[[1-(2'-chloro[1,1'-biphenyl]-4-yl)-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)

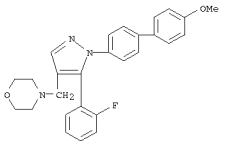


RN 508219-55-4 HCAPLUS
CN Morpholine, 4-[[1-(3',5'-dichloro[1,1'-biphenyl]-4-yl)-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)

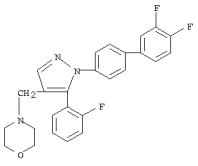


RN 508219-56-5 HCAPLUS
CN Morpholine, 4-[[5-(2-fluorophenyl)-1-(4'-methoxy[1,1'-biphenyl]-4-yl)-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)

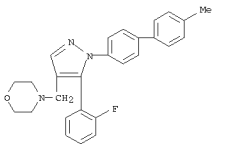
L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 508219-57-6 HCAPLUS
CN Morpholine, 4-[[1-(3',4'-difluoro[1,1'-biphenyl]-4-yl)-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)

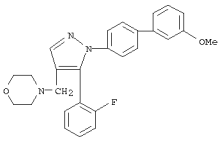


RN 508219-58-7 HCAPLUS
CN Morpholine, 4-[[5-(2-fluorophenyl)-1-(4'-methyl[1,1'-biphenyl]-4-yl)-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)

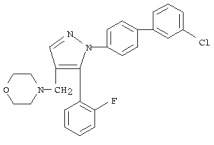


RN 508219-59-8 HCAPLUS
CN Morpholine, 4-[[5-(2-fluorophenyl)-1-(3'-methoxy[1,1'-biphenyl]-4-yl)-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)

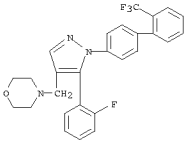
L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 508219-60-1 HCAPLUS
CN Morpholine, 4-[[1-(3'-chloro[1,1'-biphenyl]-4-yl)-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)

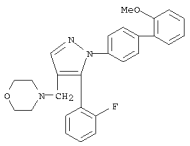


RN 508219-61-2 HCAPLUS
CN Morpholine, 4-[[5-(2-fluorophenyl)-1-[2'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)

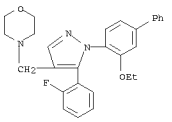


RN 508219-62-3 HCAPLUS
CN Morpholine, 4-[[5-(2-fluorophenyl)-1-(2'-methoxy[1,1'-biphenyl]-4-yl)-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)

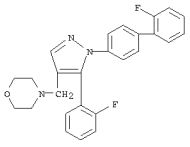
L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



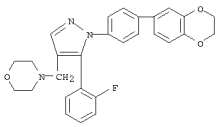
RN 508219-63-4 HCAPLUS
CN Morpholine, 4-[[1-(3-ethoxy[1,1'-biphenyl]-4-yl)-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)



RN 508219-64-5 HCAPLUS
CN Morpholine, 4-[[1-(2'-fluoro[1,1'-biphenyl]-4-yl)-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)

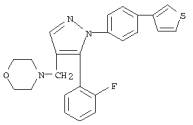


RN 508219-65-6 HCAPLUS
CN Morpholine, 4-[[1-[4-(2,3-dihydro-1,4-benzodioxin-6-yl)phenyl]-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)

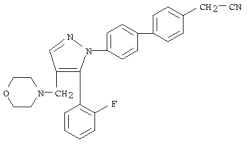


RN 508219-66-7 HCAPLUS
CN Morpholine, 4-[[5-(2-fluorophenyl)-1-[4-(3-thienyl)phenyl]-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)

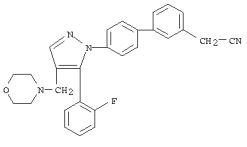
L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



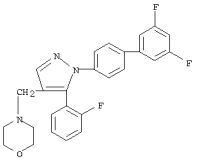
RN 508219-68-9 HCAPLUS
CN [1,1'-Biphenyl]-4-acetonitrile, 4'-[5-(2-fluorophenyl)-4-(4-morpholinylmethyl)-1H-pyrazol-1-yl]- (CA INDEX NAME)



RN 508219-69-0 HCAPLUS
CN [1,1'-Biphenyl]-3-acetonitrile, 4'-[5-(2-fluorophenyl)-4-(4-morpholinylmethyl)-1H-pyrazol-1-yl]- (CA INDEX NAME)

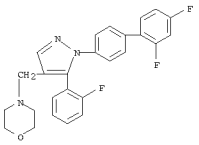


RN 508219-70-3 HCAPLUS
CN Morpholine, 4-[[1-(3',5'-difluoro[1,1'-biphenyl]-4-yl)-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)

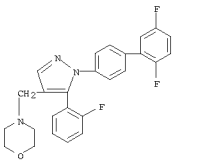


RN 508219-71-4 HCAPLUS
CN Morpholine, 4-[[1-(2',4'-difluoro[1,1'-biphenyl]-4-yl)-5-(2-fluorophenyl)-

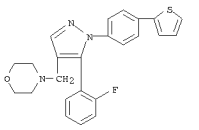
L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)



RN 508219-72-5 HCAPLUS
CN Morpholine, 4-[[1-(2',5'-difluoro[1,1'-biphenyl]-4-yl)-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)

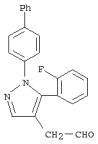


RN 508219-73-6 HCAPLUS
CN Morpholine, 4-[[5-(2-fluorophenyl)-1-[4-(2-thienyl)phenyl]-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)

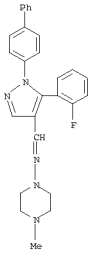


RN 508219-74-7 HCAPLUS
CN Morpholine, 4-[[1-(4'-chloro[1,1'-biphenyl]-4-yl)-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)

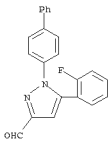
L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
(CA INDEX NAME)



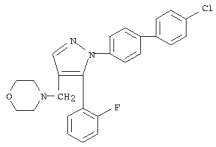
RN 508219-85-0 HCAPLUS
CN 1-Piperazinamine, N-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]methylene]-4-methyl- (CA INDEX NAME)



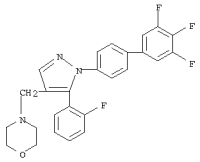
RN 508219-87-2 HCAPLUS
CN 1H-Pyrazole-3-carboxaldehyde, 1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)- (CA INDEX NAME)



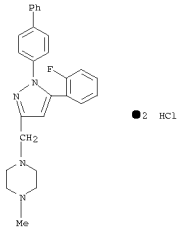
L15 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 508219-75-8 HCAPLUS
CN Morpholine, 4-[[5-(2-fluorophenyl)-1-(3',4',5'-trifluoro[1,1'-biphenyl]-4-yl)-1H-pyrazol-4-yl]methyl]- (CA INDEX NAME)



RN 508219-86-1 HCAPLUS
CN Piperazine, 1-[[1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-1H-pyrazol-3-yl]methyl]-4-methyl-, dihydrochloride (9CI) (CA INDEX NAME)



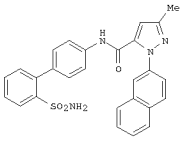
IT 508219-84-9 508219-85-0 508219-87-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of pyrazoles as glycine transporter protein inhibitors for the treatment of neurodegenerative diseases)
RN 508219-84-9 HCAPLUS
CN 1H-Pyrazole-4-acetaldehyde, 1-[1,1'-biphenyl]-4-yl-5-(2-fluorophenyl)-

=> d bib abs hitstr l46 tot

L46 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:522631 HCAPLUS
DN 137:93747
TI Preparation of pyrazolecarboxamides as inhibitors of factor Xa
IN Zhu, Bing-yan; Jia, Zhaozhong Jon; Huang, Wenrong; Song, Yonghong; Kanter, James; Scarborough, Robert M.
PA USA
SO U.S. Pat. Appl. Publ., 303 pp., Cont.-in-part of U.S. Ser. No. 662,807.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 6

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US2002091116 | A1 | 20020711 | 2001US-0794214 | 20010228 <-- |
| US---6632815 | B2 | 20031014 | | |
| US---6720317 | B1 | 20040413 | 2000US-0662807 | 20000915 |
| US---6686368 | B1 | 20040203 | 2003US-0387927 | 20030312 |
| US2004116399 | A1 | 20040617 | 2003US-0600695 | 20030620 |
| US2006020039 | A1 | 20060126 | 2005US-0035767 | 20050114 |
| US---7285565 | B2 | 20071023 | | |
| PRAI 1999US-154332P | P | 19990917 | | |
| 2000US-0662807 | A2 | 20000915 | | |
| 2000US-185746P | P | 20000229 | | |
| 2000US-0663420 | A1 | 20000915 | | |
| 2001US-0794214 | A1 | 20010228 | | |

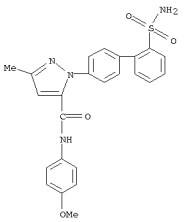
OS MARPAT 137:93747
GI



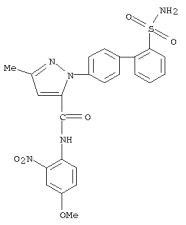
I

AB The title compds. AQDEGJX [A = alkyl, cycloalkyl, (un)substituted Ph, naphthyl, etc.; Q = a direct link, divalent alkyl, alkenyl, etc.; D = a direct link, (un)substituted Ph, 5-10 membered (non)aromatic heterocyclyl; E = a direct link, (CH2)qCO, CO(CH2)x, etc.; q, x = 0-2; G = (un)substituted Ph, 5-6 membered heteroaryl; J = a direct link, SO2, CO, etc.; X = (un)substituted Ph, naphthyl, 6-membered heteroaryl, etc.] having activity against mammalian factor Xa, and useful in vitro or in vivo for preventing or treating coagulation disorders, were prepared E.g., a 3-step synthesis of the pyrazolecarboxamide I was given.
IT 330803-16-2P 330803-17-3P 330803-18-4P
330803-19-5P 330803-20-8P 330803-21-9P
330803-22-0P 330803-23-1P 330803-24-2P
330803-25-3P 330803-33-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pyrazolecarboxamides as inhibitors of factor Xa)
RN 330803-16-2 HCAPLUS
CN 1H-Pyrazole-5-carboxamide, 1-[1,1'-biphenyl]-4-yl-N-(4-chlorophenyl)-3-methyl- (CA INDEX NAME)

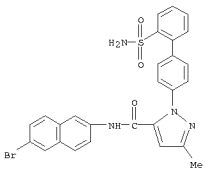
L46 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 330803-20-8 HCAPLUS
CN 1H-Pyrazole-5-carboxamide, 1-[2'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-N-(4-methoxy-2-nitrophenyl)-3-methyl- (CA INDEX NAME)

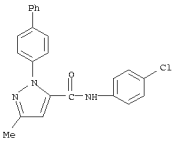


RN 330803-21-9 HCAPLUS
CN 1H-Pyrazole-5-carboxamide, 1-[2'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-N-(6-bromo-2-naphthalenyl)-3-methyl- (CA INDEX NAME)

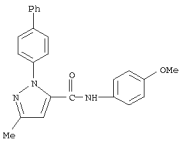


RN 330803-22-0 HCAPLUS
CN 1H-Pyrazole-5-carboxamide, 1-[2'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-3-methyl-N-2-naphthalenyl- (CA INDEX NAME)

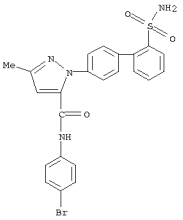
L46 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 330803-17-3 HCAPLUS
CN 1H-Pyrazole-5-carboxamide, 1-[1,1'-biphenyl]-4-yl-N-(4-methoxyphenyl)-3-methyl- (CA INDEX NAME)

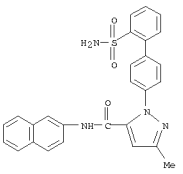


RN 330803-18-4 HCAPLUS
CN 1H-Pyrazole-5-carboxamide, 1-[2'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-N-(4-bromophenyl)-3-methyl- (CA INDEX NAME)

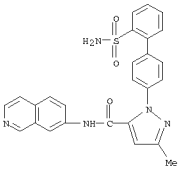


RN 330803-19-5 HCAPLUS
CN 1H-Pyrazole-5-carboxamide, 1-[2'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-N-(4-methoxyphenyl)-3-methyl- (CA INDEX NAME)

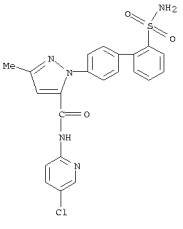
L46 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 330803-23-1 HCAPLUS
CN 1H-Pyrazole-5-carboxamide, 1-[2'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-N-7-isoquinolinyl-3-methyl- (CA INDEX NAME)

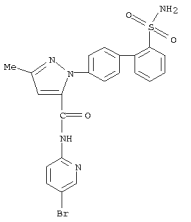


RN 330803-24-2 HCAPLUS
CN 1H-Pyrazole-5-carboxamide, 1-[2'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-N-(5-chloro-2-pyridinyl)-3-methyl- (CA INDEX NAME)

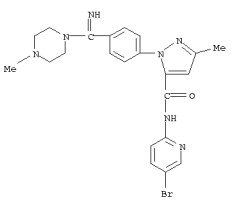


RN 330803-25-3 HCAPLUS
CN 1H-Pyrazole-5-carboxamide, 1-[2'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-N-(5-bromo-2-pyridinyl)-3-methyl- (CA INDEX NAME)

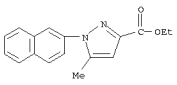
L46 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 330803-33-3 HCAPLUS
CN 1H-Pyrazole-5-carboxamide, N-(5-bromo-2-pyridinyl)-1-[4-[imino(4-methyl-1-piperazinyl)methyl]phenyl]-3-methyl- (CA INDEX NAME)

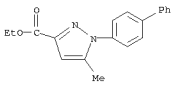


IT 330803-41-3P 330803-91-3P 330803-93-5P
330803-94-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of pyrazolecarboxamides as inhibitors of factor Xa)
RN 330803-41-3 HCAPLUS
CN 1H-Pyrazole-3-carboxylic acid, 5-methyl-1-(2-naphthalenyl)-, ethyl ester (CA INDEX NAME)

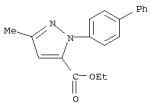


RN 330803-91-3 HCAPLUS
CN 1H-Pyrazole-5-carboxylic acid, 1-[1,1'-biphenyl]-4-yl-3-methyl-, ethyl ester (CA INDEX NAME)

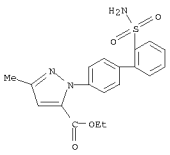
L46 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



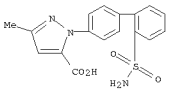
L46 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



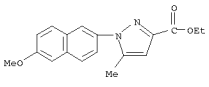
RN 330803-93-5 HCAPLUS
CN 1H-Pyrazole-5-carboxylic acid, 1-[2'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-3-methyl-, ethyl ester (CA INDEX NAME)



RN 330803-94-6 HCAPLUS
CN 1H-Pyrazole-5-carboxylic acid, 1-[2'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-3-methyl- (CA INDEX NAME)



IT 330803-76-4P 330803-92-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of pyrazolecarboxamides as inhibitors of factor Xa)
RN 330803-76-4 HCAPLUS
CN 1H-Pyrazole-3-carboxylic acid, 1-(6-methoxy-2-naphthalenyl)-5-methyl-, ethyl ester (CA INDEX NAME)

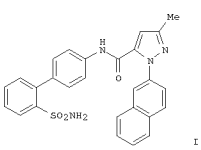


RN 330803-92-4 HCAPLUS
CN 1H-Pyrazole-3-carboxylic acid, 1-[1,1'-biphenyl]-4-yl-5-methyl-, ethyl ester (CA INDEX NAME)

L46 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2001:208248 HCAPLUS
DN 134:252334
TI Preparation of 1-naphthyl-3-methyl-1H-pyrazole-5-carboxamides as inhibitors of factor Xa
IN Zhu, Bing-Yan; Jia, Zhaozhong Jon; Huang, Wenrong; Song, Yonghong; Kanter, James; Scarborough, Robert M.
PA Cor Therapeutics Inc., USA
SO PCT Int. Appl., 314 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 6

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | WO2001019798 | A2 | 20010322 | 2000WO-US25195 | 20000915 <-- |
| | WO2001019798 | A3 | 20011025 | | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| | CA---2385589 | A1 | 20010322 | 2000CA-2385589 | 20000915 <-- |
| | AU-200074866 | A | 20010417 | 2000AU-0074866 | 20000915 <-- |
| | AU----781880 | B2 | 20050616 | | |
| | EP---1216231 | A2 | 20020626 | 2000EP-0963451 | 20000915 <-- |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL | | | | |
| | BR2000014078 | A | 20021231 | 2000BR-0014078 | 20000915 <-- |
| | TR-200201413 | T2 | 20030221 | 2002TR-0001413 | 20000915 <-- |
| | JP2003509412 | T | 20030311 | 2001JP-0523378 | 20000915 |
| | HU2002003954 | A2 | 20030328 | 2002HU-0003954 | 20000915 |
| | NZ----517828 | A | 20031031 | 2000NZ-0517828 | 20000915 |
| | NO2002001230 | A | 20020521 | 2002NO-0001230 | 20020312 <-- |
| | MX2002PA02762 | A | 20031014 | 2002MX-PA02762 | 20020314 |
| | ZA2002002117 | A | 20031215 | 2002ZA-0002117 | 20020314 |
| | ZA2002002116 | A | 20040210 | 2002ZA-0002116 | 20020314 |
| | ZA2003006488 | A | 20040216 | 2003ZA-0006488 | 20030820 |
| | ZA2003006490 | A | 20040323 | 2003ZA-0006490 | 20030820 |
| | US2006020039 | A1 | 20060126 | 2005US-0035767 | 20050114 |
| | US----7285565 | B2 | 20071023 | | |
| PRAI | 1999US-154332P | P | 19990917 | | |
| | 2000US-185746P | P | 20000229 | | |
| | 2000US-0663420 | A1 | 20000915 | | |
| | 2000WO-US25195 | W | 20000915 | | |

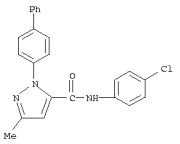
OS MARPAT 134:252334
GI



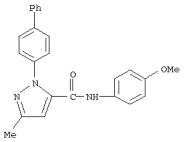
I

AB The title compds. AQDEGJX [A = alkyl, cycloalkyl, (un)substituted Ph; Q = a direct link, alkylene, CO, etc.; D = a direct link, (un)phenylene, etc.; E = a direct link, (CH2)qCO, SO2, etc.; q = 0-2; G = (un)substituted Ph, (un)substituted 5-6 membered (non)aromatic heterocyclic a ring containing 1-4 heteroatoms selected from N, O and S; J = a direct link, SO2, CO, etc.; X = (un)substituted Ph, naphthyl, heteroaryl] having activity against mammalian factor Xa, and therefore useful in vitro or in vivo for

L46 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
preventing or treating coagulation disorders, were prepd. E.g., a 3-step synthesis of the pyrazolecarboxamide I was described.
IT 330803-16-2P 330803-17-3P 330803-18-4P
330803-19-5P 330803-20-8P 330803-21-9P
330803-22-0P 330803-23-1P 330803-24-2P
330803-25-3P 330803-33-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 1-naphthyl-3-methyl-1H-pyrazole-5-carboxamides as inhibitors of factor Xa)
RN 330803-16-2 HCAPLUS
CN 1H-Pyrazole-5-carboxamide, 1-[1,1'-biphenyl]-4-yl-N-(4-chlorophenyl)-3-methyl- (CA INDEX NAME)

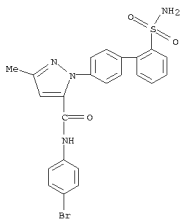


RN 330803-17-3 HCAPLUS
CN 1H-Pyrazole-5-carboxamide, 1-[1,1'-biphenyl]-4-yl-N-(4-methoxyphenyl)-3-methyl- (CA INDEX NAME)

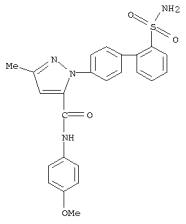


RN 330803-18-4 HCAPLUS
CN 1H-Pyrazole-5-carboxamide, 1-[2'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-N-(4-bromophenyl)-3-methyl- (CA INDEX NAME)

L46 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

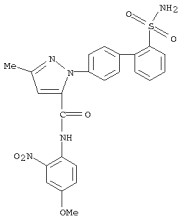


RN 330803-19-5 HCAPLUS
CN 1H-Pyrazole-5-carboxamide, 1-[2'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-N-(4-methoxyphenyl)-3-methyl- (CA INDEX NAME)

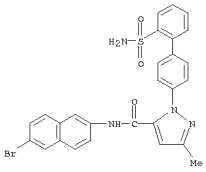


RN 330803-20-8 HCAPLUS
CN 1H-Pyrazole-5-carboxamide, 1-[2'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-N-(4-methoxy-2-nitrophenyl)-3-methyl- (CA INDEX NAME)

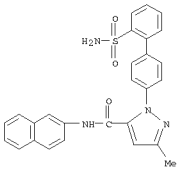
L46 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 330803-21-9 HCAPLUS
CN 1H-Pyrazole-5-carboxamide, 1-[2'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-N-(6-bromo-2-naphthalenyl)-3-methyl- (CA INDEX NAME)

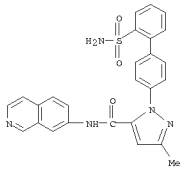


RN 330803-22-0 HCAPLUS
CN 1H-Pyrazole-5-carboxamide, 1-[2'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-3-methyl-N-2-naphthalenyl- (CA INDEX NAME)

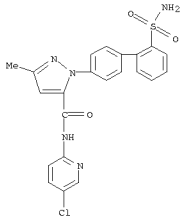


RN 330803-23-1 HCAPLUS
CN 1H-Pyrazole-5-carboxamide, 1-[2'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-N-7-isoquinolinyl-3-methyl- (CA INDEX NAME)

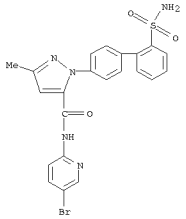
L46 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 330803-24-2 HCAPLUS
CN 1H-Pyrazole-5-carboxamide, 1-[2'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-N-(5-chloro-2-pyridinyl)-3-methyl- (CA INDEX NAME)

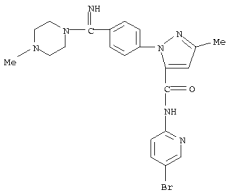


RN 330803-25-3 HCAPLUS
CN 1H-Pyrazole-5-carboxamide, 1-[2'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-N-(5-bromo-2-pyridinyl)-3-methyl- (CA INDEX NAME)

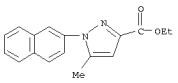


RN 330803-33-3 HCAPLUS
CN 1H-Pyrazole-5-carboxamide, N-(5-bromo-2-pyridinyl)-1-[4-[imino(4-methyl-1-piperazinyl)methyl]phenyl]-3-methyl- (CA INDEX NAME)

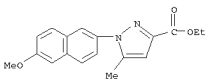
L46 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



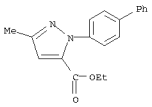
IT 330803-41-3P 330803-76-4P 330803-91-3P
330803-92-4P 330803-93-5P 330803-94-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 1-naphthyl-3-methyl-1H-pyrazole-5-carboxamides as inhibitors of factor Xa)
RN 330803-41-3 HCAPLUS
CN 1H-Pyrazole-3-carboxylic acid, 5-methyl-1-(2-naphthalenyl)-, ethyl ester (CA INDEX NAME)



RN 330803-76-4 HCAPLUS
CN 1H-Pyrazole-3-carboxylic acid, 1-(6-methoxy-2-naphthalenyl)-5-methyl-, ethyl ester (CA INDEX NAME)

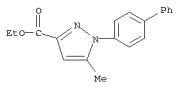


RN 330803-91-3 HCAPLUS
CN 1H-Pyrazole-5-carboxylic acid, 1-[1,1'-biphenyl]-4-yl-3-methyl-, ethyl ester (CA INDEX NAME)

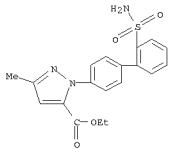


L46 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

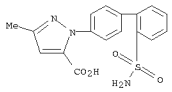
RN 330803-92-4 HCAPLUS
CN 1H-Pyrazole-3-carboxylic acid, 1-[1,1'-biphenyl]-4-yl-5-methyl-, ethyl ester (CA INDEX NAME)



RN 330803-93-5 HCAPLUS
CN 1H-Pyrazole-5-carboxylic acid, 1-[2'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-3-methyl-, ethyl ester (CA INDEX NAME)



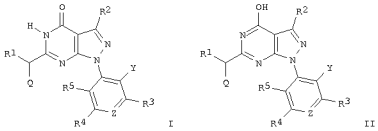
RN 330803-94-6 HCAPLUS
CN 1H-Pyrazole-5-carboxylic acid, 1-[2'-(aminosulfonyl)[1,1'-biphenyl]-4-yl]-3-methyl- (CA INDEX NAME)



L46 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 2000:260231 HCAPLUS
DN 132:293770
TI Preparation of 6-substituted pyrazolo[3,4-d]pyrimidin-4-ones as cyclin dependent kinase inhibitors
IN Markwalder, Jay A.; Seitz, Steven P.; Sherk, Susan R.
PA Du Pont Pharmaceuticals Company, USA
SO PCT Int. Appl., 155 pp.
CODEN: PIXD2
DT Patent
LA English
FAN.CNT 1

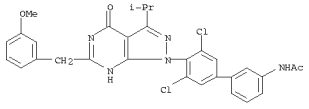
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI WO2000021926 | A2 | 20000420 | 1999WO-US23512 | 19991013 <-- |
| WO2000021926 | A3 | 20000803 | | |
| W: AL, AU, BR, CA, CN, CZ, EE, HU, IL, IN, JP, KR, LT, LV, MK, MX, NO, NZ, PL, RO, SG, SI, SK, TR, UA, VN, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| US---6531477 | B1 | 20030311 | 1999US-0416584 | 19991012 |
| CA---2345809 | A1 | 20000420 | 1999CA-2345809 | 19991013 <-- |
| EP---1121363 | A2 | 20010808 | 1999EP-0951875 | 19991013 <-- |
| EP---1121363 | B1 | 20041222 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| JP2002537223 | T | 20021105 | 2000JP-0575835 | 19991013 <-- |
| AT---285411 | T | 20050115 | 1999AT-0951875 | 19991013 |
| PT---1121363 | T | 20050429 | 1999PT-0951875 | 19991013 |
| ES---2235528 | T3 | 20050701 | 1999ES-0951875 | 19991013 |
| US2002013328 | A1 | 20020131 | 2001US-0794825 | 20010227 <-- |
| US---6559152 | B2 | 20030506 | | |
| CA---2431038 | A1 | 20020906 | 2002CA-2431038 | 20020227 <-- |
| WO2002067654 | A2 | 20020906 | 2002WO-US06002 | 20020227 <-- |
| WO2002067654 | A3 | 20021031 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU2002255614 | A1 | 20020912 | 2002AU-0255614 | 20020227 <-- |
| EP---1383769 | A2 | 20040128 | 2002EP-0725023 | 20020227 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| JP2004520407 | T | 20040708 | 2002JP-0567036 | 20020227 |
| PRAI 1998US-103957P | P | 19981013 | | |
| 1999US-0416584 | A1 | 19991012 | | |
| 1999WO-US23512 | W | 19991013 | | |
| 2001US-0794825 | A | 20010227 | | |
| 2002WO-US06002 | W | 20020227 | | |

OS MARPAT 132:293770
GI

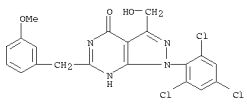


AB The title compds. [I, alternatively represented by tautomer II; Q = H, OH, Me, Et; Y = F, Cl, Br, I; Z = N, CR6; R1 = (un)substituted Ph, naphthyl,

L46 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
tropone, etc.; R2 = alkyl, alkenyl, alkynyl, etc.; R3 = H, F, Cl, etc.; R4 = H, F, Cl, etc.; R5 = H, alkyl, F, etc.; R6 = H, F, Cl, etc.] which are potent inhibitors of the class of enzymes known as cyclin dependent kinases (no data), which relate to the catalytic subunits cyclin dependent kinase 1-8 and their regulatory subunits known as cyclins A-H, K, N, and T, and are useful in treating cancer or other proliferative diseases, were prepd. Thus, reacting 5-amino-3-methylthio-1-(2,4,6-trichlorophenyl)pyrazole-4-carboxamide with 3-methoxyphenylacetyl chloride in the presence of NaOEt in EtOH afforded 92% I [Q = H; Y = Cl; R1 = 3-MeOC6H4; R2 = MeS; R3, R4 = H; R5 = Cl; Z = CCl].
IT 264138-33-2P 264139-02-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 6-substituted pyrazolo[3,4-d]pyrimidin-4-ones as cyclin dependent kinase inhibitors)
RN 264138-33-2 HCAPLUS
CN Acetamide, N-[3',5'-dichloro-4'-[4,5-dihydro-6-[(3-methoxyphenyl)methyl]-3-(1-methylethyl)-4-oxo-1H-pyrazolo[3,4-d]pyrimidin-1-yl][1,1'-biphenyl]-3-yl]- (CA INDEX NAME)



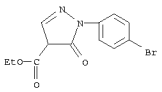
RN 264139-02-8 HCAPLUS
CN 4H-Pyrazolo[3,4-d]pyrimidin-4-one, 1,5-dihydro-3-(hydroxymethyl)-6-[(3-methoxyphenyl)methyl]-1-(2,4,6-trichlorophenyl)- (CA INDEX NAME)



L46 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1998:509066 HCAPLUS
DN 129:144878
TI Pyrazole derivatives for cannabinoid receptor modulators, preparation, and therapeutic use
IN Xiang, Jia Ning; Elliott, John Duncan; Atkinson, Steven Todd; Christensen, Siegfried Benjamin, IV
PA Smithkline Beecham Corp., USA
SO PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

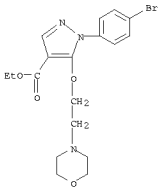
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI WO---9831227 | A1 | 19980723 | 1998WO-US01175 | 19980120 <-- |
| W: CA, JP, US | | | | |
| RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| CA---2278307 | A1 | 19980723 | 1998CA-2278307 | 19980120 <-- |
| EP----971588 | A1 | 20000119 | 1998EP-0904629 | 19980120 <-- |
| EP----971588 | B1 | 20040317 | | |
| R: BE, CH, DE, ES, FR, GB, IT, LI, NL | | | | |
| JP2001508799 | T | 20010703 | 1998JP-0534688 | 19980120 <-- |
| ES---2213892 | T3 | 20040901 | 1998ES-0904629 | 19980120 |
| US---6100259 | A | 20000808 | 1999US-0355151 | 19991015 <-- |
| PRAI 1997US-035073P | P | 19970121 | | |
| 1998WO-US01175 | W | 19980120 | | |

OS MARPAT 129:144878
AB Pyrazole derivs. are provided which are cannabinoid receptor modulators. The compds. of the invention may be used to treat a variety of diseases, e.g. immunol.-mediated inflammatory diseases and renal ischemia. Preparation of Et 5-(2-morpholin-4-ylethoxy)-1-[4-(2-formylphenyl)phenyl]pyrazole-4-carboxylate is described.
IT 66530-36-7P 210819-95-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction; pyrazole derivs. for cannabinoid receptor modulators, preparation, and therapeutic use)
RN 66530-36-7 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-(4-bromophenyl)-4,5-dihydro-5-oxo-, ethyl ester (CA INDEX NAME)

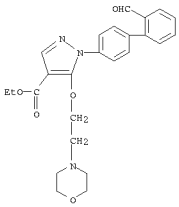


RN 210819-95-7 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-(4-bromophenyl)-5-[2-(4-morpholinyl)ethoxy]-, ethyl ester (CA INDEX NAME)

L46 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

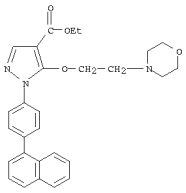


IT 210819-24-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(pyrazole derivs. for cannabinoid receptor modulators, preparation, and therapeutic use)
RN 210819-24-2 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-(2'-formyl[1,1'-biphenyl]-4-yl)-5-[2-(4-morpholinyl)ethoxy]-, ethyl ester (CA INDEX NAME)

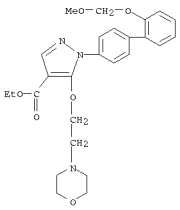


IT 210819-25-3 210819-26-4 210819-27-5
210819-28-6 210819-29-7 210819-30-0
210819-31-1 210819-33-3 210819-34-4
210819-35-5 210819-36-6 210819-37-7
210819-40-2 210819-42-4 210819-48-0
210819-52-6 210819-53-7 210819-54-8
210819-55-9 210819-56-0 210819-57-1
210819-58-2 210819-59-3 210819-60-6
210819-61-7 210819-62-8 210819-63-9
210819-64-0 210819-65-1 210819-66-2
210819-67-3 210819-71-9 210819-72-0
210819-73-1 210819-74-2 210819-76-4
210819-77-5 210819-78-6 210819-81-1
210819-83-3 210819-84-4 210819-85-5
210819-86-6 210819-91-3 210819-92-4
210819-93-5 210819-94-6
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

L46 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
(Uses)
(pyrazole derivs. for cannabinoid receptor modulators, prepn., and therapeutic use)
RN 210819-25-3 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 5-[2-(4-morpholinyl)ethoxy]-1-[4-(1-naphthalenyl)phenyl]-, ethyl ester (CA INDEX NAME)

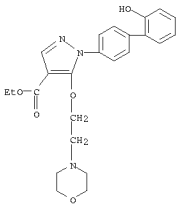


RN 210819-26-4 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-[2'-(methoxymethoxy)[1,1'-biphenyl]-4-yl]-5-[2-(4-morpholinyl)ethoxy]-, ethyl ester (CA INDEX NAME)

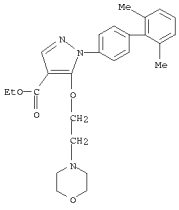


RN 210819-27-5 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-(2'-hydroxy[1,1'-biphenyl]-4-yl)-5-[2-(4-morpholinyl)ethoxy]-, ethyl ester (CA INDEX NAME)

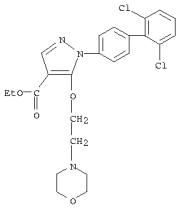
L46 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 210819-28-6 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-(2',6'-dimethyl[1,1'-biphenyl]-4-yl)-5-[2-(4-morpholinyl)ethoxy]-, ethyl ester (CA INDEX NAME)

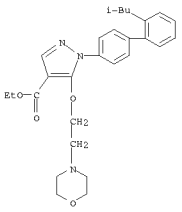


RN 210819-29-7 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-(2',6'-dichloro[1,1'-biphenyl]-4-yl)-5-[2-(4-morpholinyl)ethoxy]-, ethyl ester (CA INDEX NAME)

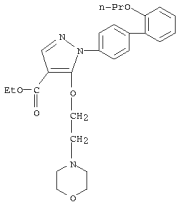


RN 210819-30-0 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-[2'-(2-methylpropyl)[1,1'-biphenyl]-4-yl]-5-[2-(4-morpholinyl)ethoxy]-, ethyl ester (CA INDEX NAME)

L46 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

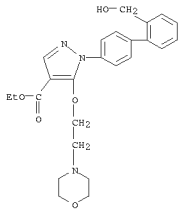


RN 210819-31-1 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 5-[2-(4-morpholinyl)ethoxy]-1-(2'-propoxy[1,1'-biphenyl]-4-yl)-, ethyl ester (CA INDEX NAME)

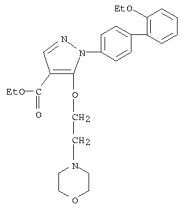


RN 210819-33-3 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-[2'-(hydroxymethyl)[1,1'-biphenyl]-4-yl]-5-[2-(4-morpholinyl)ethoxy]-, ethyl ester (CA INDEX NAME)

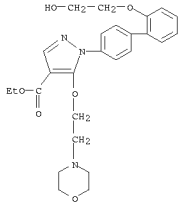
L46 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 210819-34-4 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-(2'-ethoxy[1,1'-biphenyl]-4-yl)-5-[2-(4-morpholinyl)ethoxy]-, ethyl ester (CA INDEX NAME)

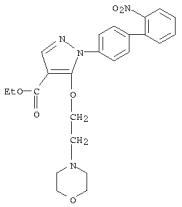


RN 210819-35-5 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-[2'-(2-hydroxyethoxy)[1,1'-biphenyl]-4-yl]-5-[2-(4-morpholinyl)ethoxy]-, ethyl ester (CA INDEX NAME)

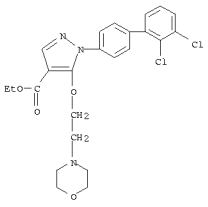


L46 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

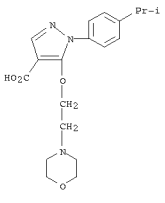
RN 210819-36-6 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 5-[2-(4-morpholinyl)ethoxy]-1-(2'-nitro[1,1'-biphenyl]-4-yl)-, ethyl ester (CA INDEX NAME)



RN 210819-37-7 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-(2',3'-dichloro[1,1'-biphenyl]-4-yl)-5-[2-(4-morpholinyl)ethoxy]-, ethyl ester (CA INDEX NAME)

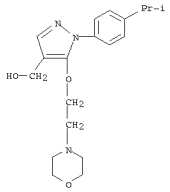


RN 210819-40-2 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-[4-(1-methylethyl)phenyl]-5-[2-(4-morpholinyl)ethoxy]- (CA INDEX NAME)

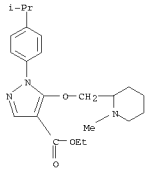


L46 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

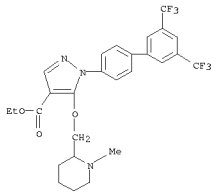
RN 210819-42-4 HCAPLUS
CN 1H-Pyrazole-4-methanol, 1-[4-(1-methylethyl)phenyl]-5-[2-(4-morpholinyl)ethoxy]- (CA INDEX NAME)



RN 210819-48-0 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-[4-(1-methylethyl)phenyl]-5-[(1-methyl-2-piperidinyl)methoxy]-, ethyl ester (CA INDEX NAME)

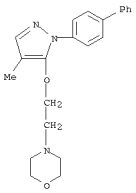


RN 210819-52-6 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-[3',5'-bis(trifluoromethyl)[1,1'-biphenyl]-4-yl]-5-[(1-methyl-2-piperidinyl)methoxy]-, ethyl ester (CA INDEX NAME)

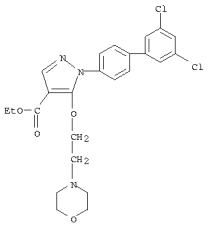


RN 210819-53-7 HCAPLUS
CN Morpholine, 4-[2-[(1-[1,1'-biphenyl]-4-yl-4-methyl-1H-pyrazol-5-

L46 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
yl]oxy]ethyl]- (CA INDEX NAME)



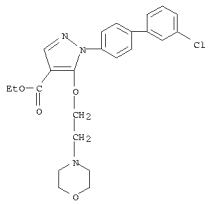
RN 210819-54-8 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-(3',5'-dichloro[1,1'-biphenyl]-4-yl)-5-[2-(4-morpholinyl)ethoxy]-, ethyl ester (CA INDEX NAME)



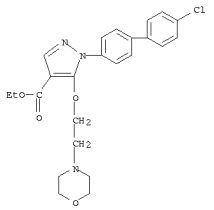
RN 210819-55-9 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-(3'-chloro[1,1'-biphenyl]-4-yl)-5-[2-(4-morpholinyl)ethoxy]-, ethyl ester (CA INDEX NAME)

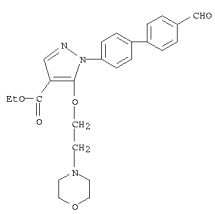
L46 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 210819-56-0 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-(4'-chloro[1,1'-biphenyl]-4-yl)-5-[2-(4-morpholinyl)ethoxy]-, ethyl ester (CA INDEX NAME)



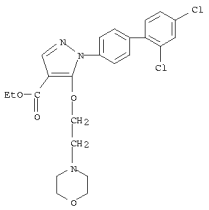
RN 210819-57-1 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-(4'-formyl[1,1'-biphenyl]-4-yl)-5-[2-(4-morpholinyl)ethoxy]-, ethyl ester (CA INDEX NAME)



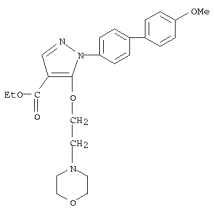


L46 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 210819-58-2 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-(2',4'-dichloro[1,1'-biphenyl]-4-yl)-5-[2-(4-morpholinyl)ethoxy]-, ethyl ester (CA INDEX NAME)

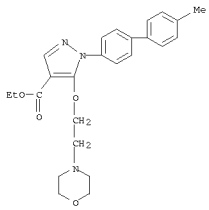


RN 210819-59-3 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-(4'-methoxy[1,1'-biphenyl]-4-yl)-5-[2-(4-morpholinyl)ethoxy]-, ethyl ester (CA INDEX NAME)

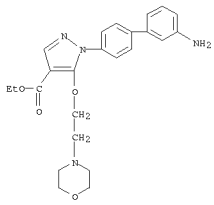


RN 210819-60-6 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-(4'-methyl[1,1'-biphenyl]-4-yl)-5-[2-(4-morpholinyl)ethoxy]-, ethyl ester (CA INDEX NAME)

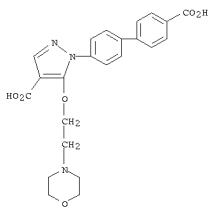
L46 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 210819-61-7 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-(3'-amino[1,1'-biphenyl]-4-yl)-5-[2-(4-morpholinyl)ethoxy]-, ethyl ester (CA INDEX NAME)

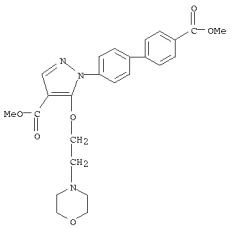


RN 210819-62-8 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-(4'-carboxy[1,1'-biphenyl]-4-yl)-5-[2-(4-morpholinyl)ethoxy]- (CA INDEX NAME)

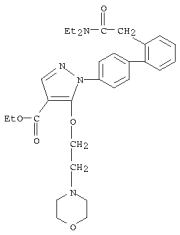


RN 210819-63-9 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-[4'-(methoxycarbonyl)[1,1'-biphenyl]-4-yl]-5-[2-(4-morpholinyl)ethoxy]-, methyl ester (CA INDEX NAME)

L46 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

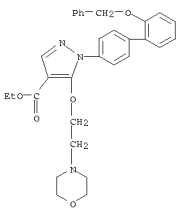


RN 210819-64-0 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-[2'-[2-(diethylamino)-2-oxoethyl][1,1'-biphenyl]-4-yl]-5-[2-(4-morpholinyl)ethoxy]-, ethyl ester (CA INDEX NAME)

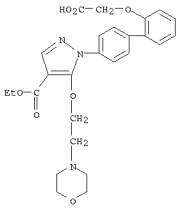


RN 210819-65-1 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 5-[2-(4-morpholinyl)ethoxy]-1-[2'-(octyloxy)[1,1'-biphenyl]-4-yl]-, ethyl ester (CA INDEX NAME)

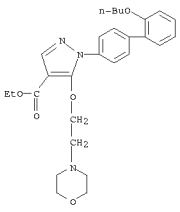
L46 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 210819-71-9 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-[2'-(carboxymethoxy)[1,1'-biphenyl]-4-yl]-5-[2-(4-morpholinyl)ethoxy]-, 4-ethyl ester (CA INDEX NAME)

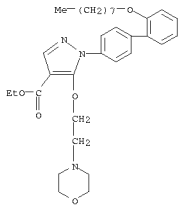


RN 210819-72-0 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-(2'-butoxy[1,1'-biphenyl]-4-yl)-5-[2-(4-morpholinyl)ethoxy]-, ethyl ester (CA INDEX NAME)

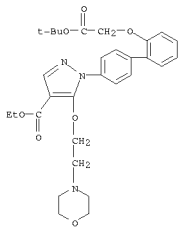


RN 210819-73-1 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-[2'-(2-methoxyethoxy)[1,1'-biphenyl]-4-yl]-5-[2-(4-morpholinyl)ethoxy]-, ethyl ester (CA INDEX NAME)

L46 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

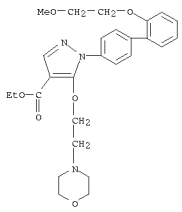


RN 210819-66-2 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-[2'-[2-(1,1-dimethylethoxy)-2-oxoethoxy][1,1'-biphenyl]-4-yl]-5-[2-(4-morpholinyl)ethoxy]-, ethyl ester (CA INDEX NAME)

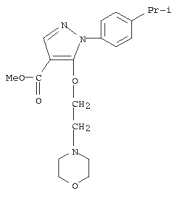


RN 210819-67-3 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 5-[2-(4-morpholinyl)ethoxy]-1-[2'-(phenylmethoxy)[1,1'-biphenyl]-4-yl]-, ethyl ester (CA INDEX NAME)

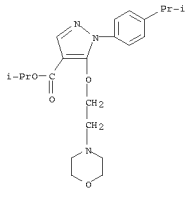
L46 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 210819-74-2 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-[4-(1-methylethyl)phenyl]-5-[2-(4-morpholinyl)ethoxy]-, methyl ester (CA INDEX NAME)

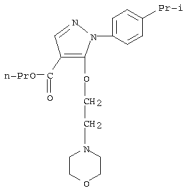


RN 210819-76-4 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-[4-(1-methylethyl)phenyl]-5-[2-(4-morpholinyl)ethoxy]-, 1-methylethyl ester (CA INDEX NAME)

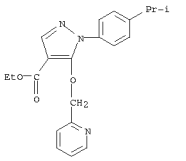


RN 210819-77-5 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-[4-(1-methylethyl)phenyl]-5-[2-(4-morpholinyl)ethoxy]-, propyl ester (CA INDEX NAME)

L46 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

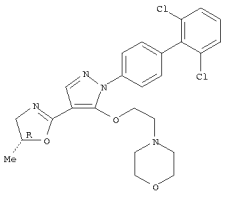


RN 210819-78-6 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-[4-(1-methylethyl)phenyl]-5-(2-pyridinylmethoxy)-, ethyl ester (CA INDEX NAME)



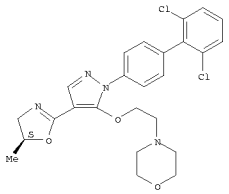
RN 210819-81-1 HCAPLUS
CN Morpholine, 4-[2-[[1-(2',6'-dichloro[1,1'-biphenyl]-4-yl)-4-[(5R)-4,5-dihydro-5-methyl-2-oxazolyl]-1H-pyrazol-5-yl]oxy]ethyl]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

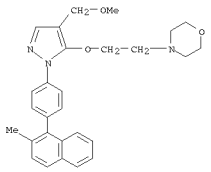


RN 210819-83-3 HCAPLUS
CN Morpholine, 4-[2-[[1-(2',6'-dichloro[1,1'-biphenyl]-4-yl)-4-[(5S)-4,5-dihydro-5-methyl-2-oxazolyl]-1H-pyrazol-5-yl]oxy]ethyl]- (CA INDEX NAME)

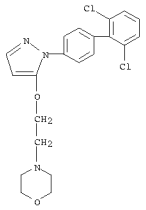
L46 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
Absolute stereochemistry. Rotation (+).



RN 210819-84-4 HCAPLUS
CN Morpholine, 4-[2-[[4-(methoxymethyl)-1-[4-(2-methyl-1-naphthalenyl)phenyl]-1H-pyrazol-5-yl]oxy]ethyl]- (CA INDEX NAME)

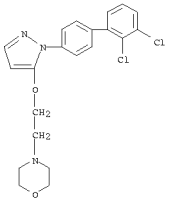


RN 210819-85-5 HCAPLUS
CN Morpholine, 4-[2-[[1-(2',6'-dichloro[1,1'-biphenyl]-4-yl)-1H-pyrazol-5-yl]oxy]ethyl]- (CA INDEX NAME)

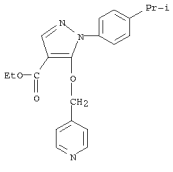


RN 210819-86-6 HCAPLUS
CN Morpholine, 4-[2-[[1-(2',3'-dichloro[1,1'-biphenyl]-4-yl)-1H-pyrazol-5-

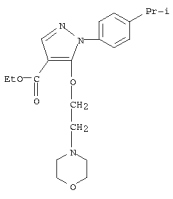
L46 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
yl]oxy]ethyl]- (CA INDEX NAME)



RN 210819-91-3 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-[4-(1-methylethyl)phenyl]-5-(4-pyridinylmethoxy)-, ethyl ester (CA INDEX NAME)

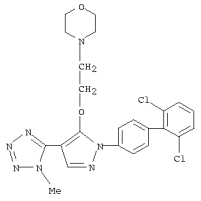


RN 210819-92-4 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-[4-(1-methylethyl)phenyl]-5-[2-(4-morpholinyl)ethoxy]-, ethyl ester (CA INDEX NAME)

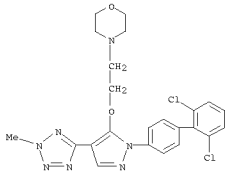


RN 210819-93-5 HCAPLUS
CN Morpholine, 4-[2-[[1-(2',6'-dichloro[1,1'-biphenyl]-4-yl)-4-(1-methyl-1H-tetrazol-5-yl)-1H-pyrazol-5-yl]oxy]ethyl]- (CA INDEX NAME)

L46 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 210819-94-6 HCAPLUS
CN Morpholine, 4-[2-[[1-(2',6'-dichloro[1,1'-biphenyl]-4-yl)-4-(2-methyl-2H-tetrazol-5-yl)-1H-pyrazol-5-yl]oxy]ethyl]- (CA INDEX NAME)

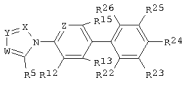


RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1998:304135 HCAPLUS
DN 128:321643
TI Preparation of pesticidal 1-polyarylpyrazoles
IN Herman, Nancy Darnell; Huber, Scot Kevin; Huang, Jamin; Timmons, Philip
PA Rhone-Poulenc Agrochimie, Fr.
SO Eur. Pat. Appl., 38 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | |
|---|---|---|---|---|---|---|
| PI | EP----839810 | A1 | 19980506 | 1997EP-0119154 | 19971103 | <-- |
| | EP----839810 | B1 | 20020925 | | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI | | | | | |
| | AT----224878 | T | 20021015 | 1997AT-0119154 | 19971103 | <-- |
| | ES---2179254 | T3 | 20030116 | 1997ES-0119154 | 19971103 | <-- |
| | JP---10158240 | A | 19980616 | 1997JP-0302250 | 19971104 | <-- |
| | US---5922884 | A | 19990713 | 1997US-0963631 | 19971104 | <-- |
| | US---6107322 | A | 20000822 | 1998US-0216878 | 19981221 | <-- |
| | US---6242475 | B1 | 20010605 | 2000US-0606185 | 20000629 | <-- |
| | US2002002195 | A1 | 20020103 | 2001US-0832861 | 20010412 | <-- |
| | US---6433002 | B2 | 20020813 | | | |
| | US-----37936 | E1 | 20021210 | 2001US-0903990 | 20010713 | <-- |
| | US2002193411 | A1 | 20021219 | 2002US-0152806 | 20020523 | <-- |
| | US---6608093 | B2 | 20030819 | | | |
| PRAI | 1996US-030128P | P | 19961104 | | | |
| | 1997US-0963631 | A3 | 19971104 | | | |
| | 1998US-0216878 | A3 | 19981221 | | | |
| | 2000US-0606185 | A3 | 20000629 | | | |
| | 2001US-0832861 | A3 | 20010412 | | | |

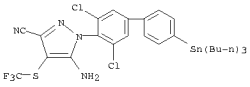
OS MARPAT 128:321643
GI



I

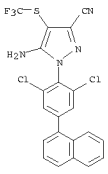
AB The title compds. [I; X = N, CR2; Y = N, CR3; W = N, CR4; R2, R3 = H, halo, OH, etc.; R4 = H, halo, alkyl, etc.; R5 = H, halo, CHO, etc.; Z = N, CR16; R12, R13, R15, R16 = H, halo, alkyl, etc.; R22-R26 = halo, alkyl, haloalkyl, etc.], useful to control pests, were prepared Thus, reaction of 5-amino-3-cyano-1-(2,6-dichloro-4-bromophenyl)-4-trifluoromethylthiopyrazole with 4-trifluoromethylphenylboronic acid in the presence of Pd2(dba)3, K2CO3 in diglyme afforded I [X = N; Y = C(CN); W = C(SCF3); R5 = NH2; Z = C(Cl); R12 = Cl; R13, R15, R22, R23, R25, R26 = H; R24 = CF3]. The prepared compds. I showed rather good activity on C. elegans.
IT 207136-54-7P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of pesticidal 1-polyarylpyrazoles)
RN 207136-54-7 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-4'-(tributylstannyl)[1,1'-biphenyl]-4-yl]-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

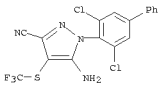


IT 207133-54-8P 207133-55-9P 207133-56-0P
207133-57-1P 207133-58-2P 207133-59-3P
207133-60-6P 207133-61-7P 207133-62-8P
207133-63-9P 207133-64-0P 207133-65-1P
207133-66-2P 207133-67-3P 207133-68-4P
207133-69-5P 207133-70-8P 207133-71-9P
207133-72-0P 207133-73-1P 207133-74-2P
207133-75-3P 207133-76-4P 207133-77-5P
207133-78-6P 207133-79-7P 207133-80-0P
207133-81-1P 207133-82-2P 207133-83-3P
207133-84-4P 207133-85-5P 207133-86-6P
207133-87-7P 207133-88-8P 207133-89-9P
207133-90-2P 207133-91-3P 207133-92-4P
207133-93-5P 207133-94-6P 207133-95-7P
207133-96-8P 207133-97-9P 207133-98-0P
207134-17-6P 207134-18-7P 207134-19-8P
207134-20-1P 207134-21-2P 207134-22-3P
207134-23-4P 207134-24-5P 207134-25-6P
207134-26-7P 207134-27-8P 207134-28-9P
207134-29-0P 207134-30-3P 207134-31-4P
207134-32-5P 207134-33-6P 207134-34-7P
207134-35-8P 207134-36-9P 207134-39-2P
207134-40-5P 207134-41-6P 207134-42-7P
207134-43-8P 207134-44-9P 207134-45-0P
207134-46-1P 207134-47-2P 207134-48-3P
207134-49-4P 207134-50-7P 207134-51-8P
207134-52-9P 207134-53-0P 207134-54-1P
207134-55-2P 207134-56-3P 207134-57-4P
207134-58-5P 207134-59-6P 207134-60-9P
207134-61-0P 207134-62-1P 207134-63-2P
207134-64-3P 207134-65-4P 207134-66-5P
207134-67-6P 207134-68-7P 207134-69-8P
207134-70-1P 207134-71-2P 207134-72-3P
207134-73-4P 207134-74-5P 207134-75-6P
207134-76-7P 207134-77-8P 207134-78-9P
207134-79-0P 207134-80-3P 207134-81-4P
207134-82-5P 207134-83-6P 207134-84-7P
207134-85-8P 207134-86-9P 207134-87-0P
207134-88-1P 207134-89-2P 207134-90-5P
207134-91-6P 207134-92-7P 207134-93-8P
207134-94-9P 207134-95-0P 207134-96-1P
207134-97-2P 207134-98-3P 207134-99-4P
207135-00-0P 207135-01-1P 207135-02-2P
207135-03-3P 207135-04-4P 207135-05-5P
207135-06-6P 207135-07-7P 207135-08-8P
207135-09-9P 207135-10-2P 207135-11-3P
207135-12-4P 207135-13-5P 207135-14-6P
207135-15-7P 207135-16-8P 207135-17-9P
207135-18-0P 207135-19-1P 207135-20-4P
207135-21-5P 207135-22-6P 207136-61-6P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pesticidal 1-polyarylpyrazoles)
RN 207133-54-8 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[2,6-dichloro-4-(1-naphthalenyl)phenyl]-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

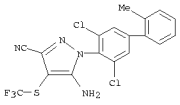
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



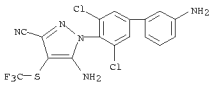
RN 207133-55-9 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)



RN 207133-56-0 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-2'-methyl[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

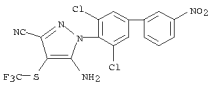


RN 207133-57-1 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3'-amino-3,5-dichloro[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

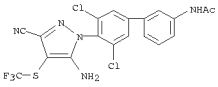


RN 207133-58-2 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-3'-nitro[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

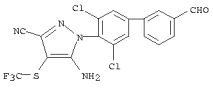
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



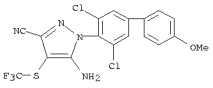
RN 207133-59-3 HCAPLUS
CN Acetamide, N-[4'-[5-amino-3-cyano-4-[(trifluoromethyl)thio]-1H-pyrazol-1-yl]-3',5'-dichloro[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)



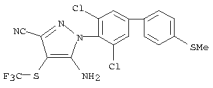
RN 207133-60-6 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-3'-formyl[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)



RN 207133-61-7 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-4'-methoxy[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

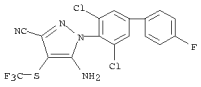


RN 207133-62-8 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-4'-(methylthio)[1,1'-biphenyl]-4-yl]-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

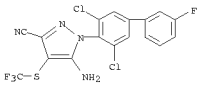


RN 207133-63-9 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-4'-fluoro[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

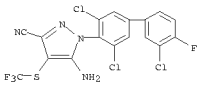
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



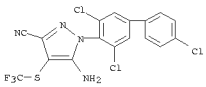
RN 207133-64-0 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-3'-fluoro[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)



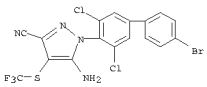
RN 207133-65-1 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,3',5-trichloro-4'-fluoro[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)



RN 207133-66-2 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,4',5-trichloro[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

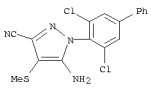


RN 207133-67-3 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(4'-bromo-3,5-dichloro[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

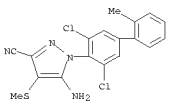


RN 207133-68-4 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,3',5,5'-tetrachloro[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

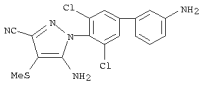
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



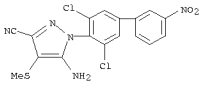
RN 207133-73-1 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-2'-methyl[1,1'-biphenyl]-4-yl)-4-(methylthio)- (CA INDEX NAME)



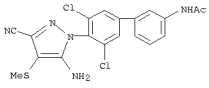
RN 207133-74-2 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3'-amino-3,5-dichloro[1,1'-biphenyl]-4-yl)-4-(methylthio)- (CA INDEX NAME)



RN 207133-75-3 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-3'-nitro[1,1'-biphenyl]-4-yl)-4-(methylthio)- (CA INDEX NAME)

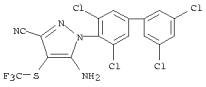


RN 207133-76-4 HCAPLUS
CN Acetamide, N-[4'-[5-amino-3-cyano-4-(methylthio)-1H-pyrazol-1-yl]-3',5'-dichloro[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

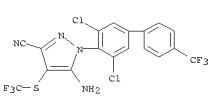


RN 207133-77-5 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-3'-formyl[1,1'-biphenyl]-4-yl)-4-(methylthio)- (CA INDEX NAME)

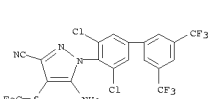
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



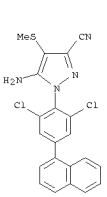
RN 207133-69-5 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-[(trifluoromethyl)thio]- (CA INDEX NAME)



RN 207133-70-8 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-3',5'-bis(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

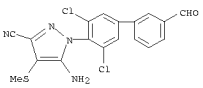


RN 207133-71-9 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[2,6-dichloro-4-(1-naphthalenyl)phenyl]-4-(methylthio)- (CA INDEX NAME)

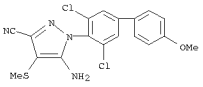


RN 207133-72-0 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro[1,1'-biphenyl]-4-yl)-4-(methylthio)- (CA INDEX NAME)

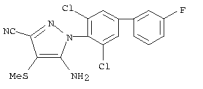
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



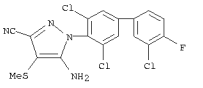
RN 207133-78-6 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-4'-methoxy[1,1'-biphenyl]-4-yl)-4-(methylthio)- (CA INDEX NAME)



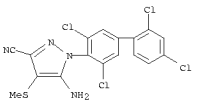
RN 207133-79-7 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-3'-fluoro[1,1'-biphenyl]-4-yl)-4-(methylthio)- (CA INDEX NAME)



RN 207133-80-0 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-4-(methylthio)-1-(3,3',5-trichloro-4'-fluoro[1,1'-biphenyl]-4-yl)- (CA INDEX NAME)

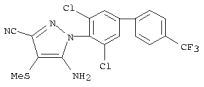


RN 207133-81-1 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-4-(methylthio)-1-(2',3,4',5-tetrachloro[1,1'-biphenyl]-4-yl)- (CA INDEX NAME)

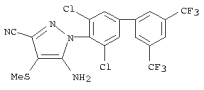


RN 207133-82-2 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-(methylthio)- (CA INDEX NAME)

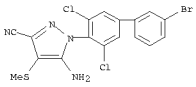
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



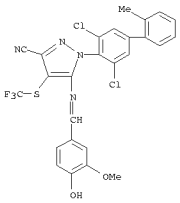
RN 207133-83-3 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-3',5'-bis(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-(methylthio)- (CA INDEX NAME)



RN 207133-84-4 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3'-bromo-3,5-dichloro[1,1'-biphenyl]-4-yl)-4-(methylthio)- (CA INDEX NAME)

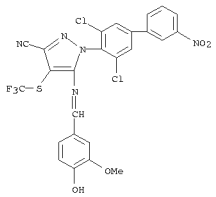


RN 207133-85-5 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 1-(3,5-dichloro-2'-methyl[1,1'-biphenyl]-4-yl)-5-[[(4-hydroxy-3-methoxyphenyl)methylene]amino]-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

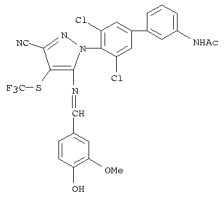


RN 207133-86-6 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 1-(3,5-dichloro-3'-nitro[1,1'-biphenyl]-4-yl)-5-[[(4-hydroxy-3-methoxyphenyl)methylene]amino]-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

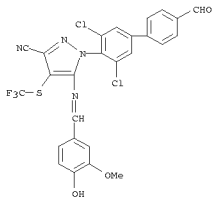
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 207133-87-7 HCAPLUS
CN Acetamide, N-[3',5'-dichloro-4'-[3-cyano-5-[[(4-hydroxy-3-methoxyphenyl)methylene]amino]-4-[(trifluoromethyl)thio]-1H-pyrazol-1-yl][1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

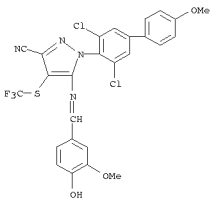


RN 207133-88-8 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 1-(3,5-dichloro-4'-formyl[1,1'-biphenyl]-4-yl)-5-[[(4-hydroxy-3-methoxyphenyl)methylene]amino]-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

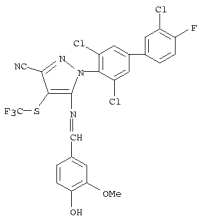


L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 207133-89-9 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 1-(3,5-dichloro-4'-methoxy[1,1'-biphenyl]-4-yl)-5-[[(4-hydroxy-3-methoxyphenyl)methylene]amino]-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

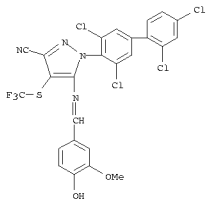


RN 207133-90-2 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-[[(4-hydroxy-3-methoxyphenyl)methylene]amino]-1-(3,3',5-trichloro-4'-fluoro[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

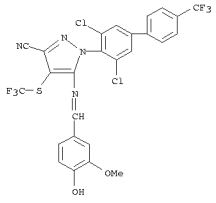


RN 207133-91-3 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-[[(4-hydroxy-3-methoxyphenyl)methylene]amino]-1-(2',3,4',5-tetrachloro[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

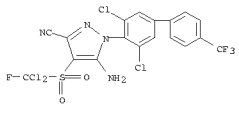
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 207133-92-4 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-5-[[(4-hydroxy-3-methoxyphenyl)methylene]amino]-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

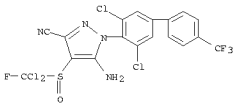


RN 207133-93-5 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-4-[(dichlorofluoromethyl)sulfonyl]-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]- (CA INDEX NAME)

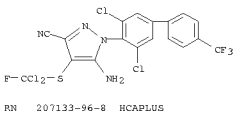


RN 207133-94-6 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-4-[(dichlorofluoromethyl)sulfinyl]-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]- (CA INDEX NAME)

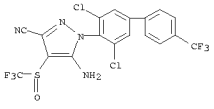
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



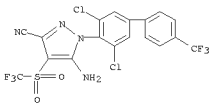
RN 207133-95-7 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-4-[(dichlorofluoromethyl)thio]-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]- (CA INDEX NAME)



RN 207133-96-8 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-[(trifluoromethyl)sulfinyl]- (CA INDEX NAME)

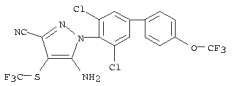


RN 207133-97-9 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-[(trifluoromethyl)sulfonyl]- (CA INDEX NAME)

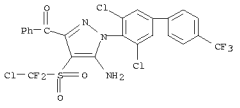


RN 207133-98-0 HCAPLUS
CN Methanone, [5-amino-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-[(trifluoromethyl)thio]-1H-pyrazol-3-yl]phenyl- (CA INDEX NAME)

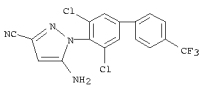
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



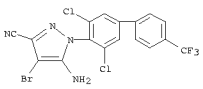
RN 207134-21-2 HCAPLUS
CN Methanone, [5-amino-4-[(chlorodifluoromethyl)sulfonyl]-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-1H-pyrazol-3-yl]phenyl- (CA INDEX NAME)



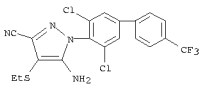
RN 207134-22-3 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]- (CA INDEX NAME)



RN 207134-23-4 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-4-bromo-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]- (CA INDEX NAME)

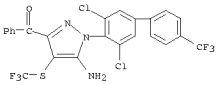


RN 207134-24-5 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-(ethylthio)- (CA INDEX NAME)

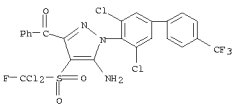


RN 207134-25-6 HCAPLUS
CN Thiocyanic acid, 5-amino-3-cyano-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-1H-pyrazol-4-yl ester (CA INDEX NAME)

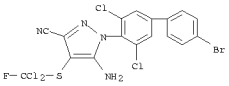
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



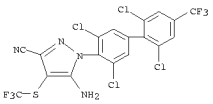
RN 207134-17-6 HCAPLUS
CN Methanone, [5-amino-4-[(dichlorofluoromethyl)sulfonyl]-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-1H-pyrazol-3-yl]phenyl- (CA INDEX NAME)



RN 207134-18-7 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(4'-bromo-3,5-dichloro[1,1'-biphenyl]-4-yl)-4-[(dichlorofluoromethyl)thio]- (CA INDEX NAME)

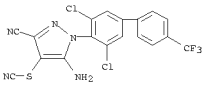


RN 207134-19-8 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[2',3,5,6'-tetrachloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

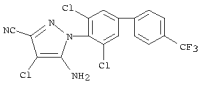


RN 207134-20-1 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-4'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

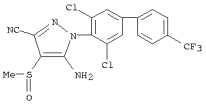
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



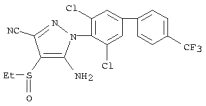
RN 207134-26-7 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-4-chloro-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]- (CA INDEX NAME)



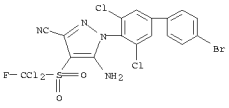
RN 207134-27-8 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-(methylsulfinyl)- (CA INDEX NAME)



RN 207134-28-9 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-(ethylsulfinyl)- (CA INDEX NAME)

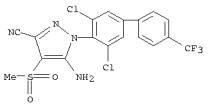


RN 207134-29-0 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(4'-bromo-3,5-dichloro[1,1'-biphenyl]-4-yl)-4-[(dichlorofluoromethyl)sulfonyl]- (CA INDEX NAME)

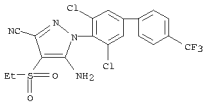


RN 207134-30-3 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-4'-

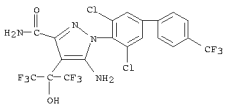
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-(methylsulfonyl)- (CA INDEX NAME)



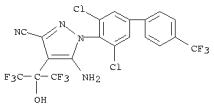
RN 207134-31-4 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-(ethylsulfonyl)- (CA INDEX NAME)



RN 207134-32-5 HCAPLUS
CN 1H-Pyrazole-3-carboxamide, 5-amino-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]- (CA INDEX NAME)

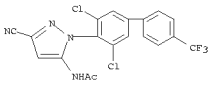


RN 207134-33-6 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]- (CA INDEX NAME)

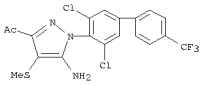


RN 207134-34-7 HCAPLUS
CN Acetamide, N-[3-cyano-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-1H-pyrazol-5-yl]- (CA INDEX NAME)

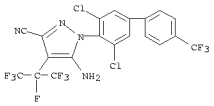
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



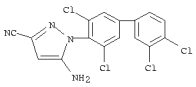
RN 207134-35-8 HCAPLUS
CN Ethanone, 1-[5-amino-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-(methylthio)-1H-pyrazol-3-yl]- (CA INDEX NAME)



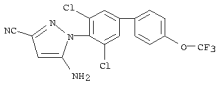
RN 207134-36-9 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]- (CA INDEX NAME)



RN 207134-39-2 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,3',4',5-tetrachloro[1,1'-biphenyl]-4-yl)- (CA INDEX NAME)

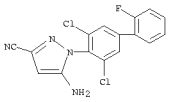


RN 207134-40-5 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-4'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]- (CA INDEX NAME)

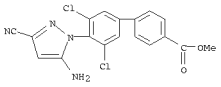


RN 207134-41-6 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-2'-fluoro[1,1'-

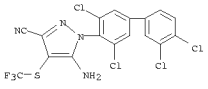
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
biphenyl]-4-yl)- (CA INDEX NAME)



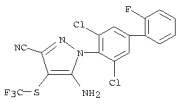
RN 207134-42-7 HCAPLUS
CN [1,1'-Biphenyl]-4-carboxylic acid, 4'-(5-amino-3-cyano-1H-pyrazol-1-yl)-3',5'-dichloro-, methyl ester (CA INDEX NAME)



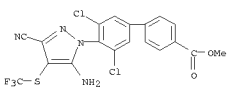
RN 207134-43-8 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,3',4',5-tetrachloro[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)



RN 207134-44-9 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-2'-fluoro[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

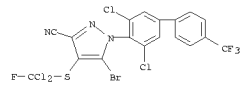


RN 207134-45-0 HCAPLUS
CN [1,1'-Biphenyl]-4-carboxylic acid, 4'-(5-amino-3-cyano-4-[(trifluoromethyl)thio]-1H-pyrazol-1-yl]-3',5'-dichloro-, methyl ester (CA INDEX NAME)

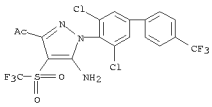


RN 207134-46-1 HCAPLUS

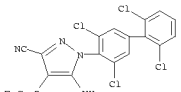
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN 1H-Pyrazole-3-carbonitrile, 5-bromo-4-[(dichlorofluoromethyl)thio]-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]- (CA INDEX NAME)



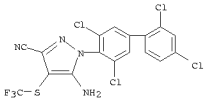
RN 207134-47-2 HCAPLUS
CN Ethanone, 1-[5-amino-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-[(trifluoromethyl)sulfonyl]-1H-pyrazol-3-yl]- (CA INDEX NAME)



RN 207134-48-3 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(2',3,5,6'-tetrachloro[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

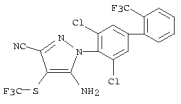


RN 207134-49-4 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(2',3,4',5-tetrachloro[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

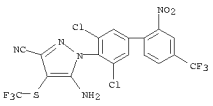


RN 207134-50-7 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-2'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

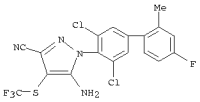
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



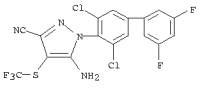
RN 207134-51-8 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-2'-nitro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-[(trifluoromethyl)thio]- (CA INDEX NAME)



RN 207134-52-9 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-4'-fluoro-2'-methyl[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

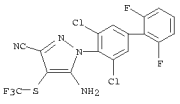


RN 207134-53-0 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-3',5'-difluoro[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

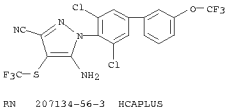


RN 207134-54-1 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-2',6'-difluoro[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

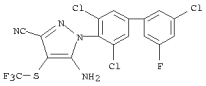
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



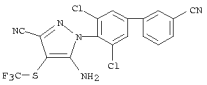
RN 207134-55-2 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]-4-[(trifluoromethyl)thio]- (CA INDEX NAME)



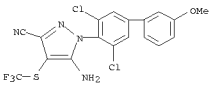
RN 207134-56-3 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,3',5-trichloro-5'-fluoro[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)



RN 207134-57-4 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-3'-cyano[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

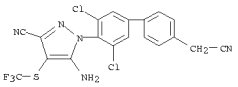


RN 207134-58-5 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-3'-methoxy[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

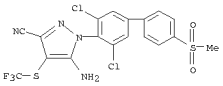


RN 207134-59-6 HCAPLUS

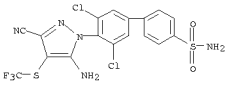
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-4'-(cyanomethyl)[1,1'-biphenyl]-4-yl]-4-[(trifluoromethyl)thio]- (CA INDEX NAME)



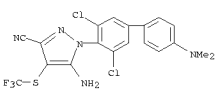
RN 207134-60-9 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]-4-[(trifluoromethyl)thio]- (CA INDEX NAME)



RN 207134-61-0 HCAPLUS
CN [1,1'-Biphenyl]-4-sulfonamide, 4'-[5-amino-3-cyano-4-[(trifluoromethyl)thio]-1H-pyrazol-1-yl]-3',5'-dichloro- (CA INDEX NAME)

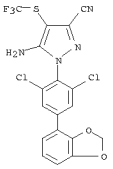


RN 207134-62-1 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-4'-(dimethylamino)[1,1'-biphenyl]-4-yl]-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

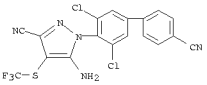


RN 207134-63-2 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[4-(1,3-benzodioxol-4-yl)-2,6-dichlorophenyl]-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

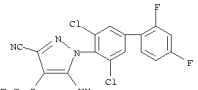
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



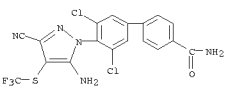
RN 207134-64-3 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-4'-cyano[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)



RN 207134-65-4 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-2',4'-difluoro[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

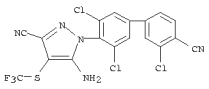


RN 207134-66-5 HCAPLUS
CN [1,1'-Biphenyl]-4-carboxamide, 4'-[5-amino-3-cyano-4-[(trifluoromethyl)thio]-1H-pyrazol-1-yl]-3',5'-dichloro- (CA INDEX NAME)

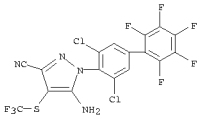


RN 207134-67-6 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,3',5-trichloro-4'-cyano[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

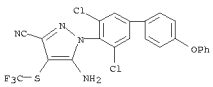
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



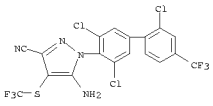
RN 207134-68-7 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-2',3',4',5',6'-pentafluoro[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)



RN 207134-69-8 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-4'-phenoxy[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

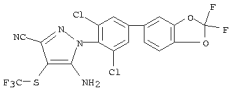


RN 207134-70-1 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(2',3,5-trichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

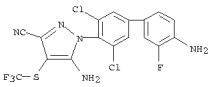


RN 207134-71-2 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(2,6-dichloro-4-(2,2-difluoro-1,3-benzodioxol-5-yl)phenyl]-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

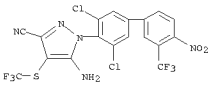
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



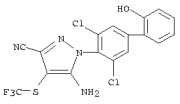
RN 207134-72-3 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(4'-amino-3,5-dichloro-3'-fluoro[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)



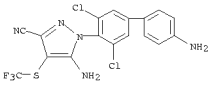
RN 207134-73-4 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-4'-nitro-3'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-[(trifluoromethyl)thio]- (CA INDEX NAME)



RN 207134-74-5 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-2'-hydroxy[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

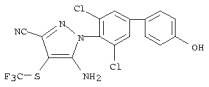


RN 207134-75-6 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(4'-amino-3,5-dichloro[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

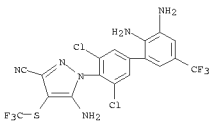


L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

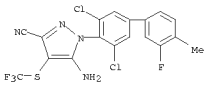
RN 207134-76-7 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-4'-hydroxy[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)



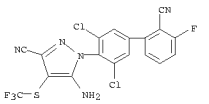
RN 207134-77-8 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(2',3'-diamino-3,5-dichloro-5'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-[(trifluoromethyl)thio]- (CA INDEX NAME)



RN 207134-78-9 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-3'-fluoro-4'-methyl[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

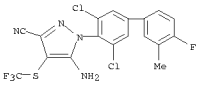


RN 207134-79-0 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-2'-cyano-3'-fluoro[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

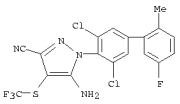


RN 207134-80-3 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-4'-fluoro-3'-methyl[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

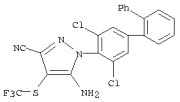
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



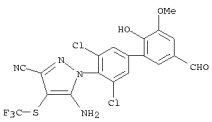
RN 207134-81-4 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-5'-fluoro-2'-methyl[1,1'-biphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (CA INDEX NAME)



RN 207134-82-5 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro[1,1':2',1''-terphenyl]-4-yl)-4-[(trifluoromethyl)thio]- (9CI) (CA INDEX NAME)

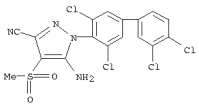


RN 207134-83-6 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-5'-formyl-2'-hydroxy-3'-methoxy[1,1'-biphenyl]-4-yl]-4-[(trifluoromethyl)thio]- (CA INDEX NAME)

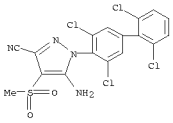


RN 207134-84-7 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-4-(methylsulfonyl)-1-(3,3',4',5-tetrachloro[1,1'-biphenyl]-4-yl)- (CA INDEX NAME)

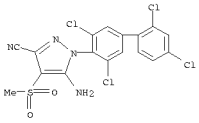
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



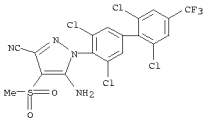
RN 207134-85-8 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-4-(methylsulfonyl)-1-(2',3,5,6'-tetrachloro[1,1'-biphenyl]-4-yl)- (CA INDEX NAME)



RN 207134-86-9 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-4-(methylsulfonyl)-1-(2',3,4',5-tetrachloro[1,1'-biphenyl]-4-yl)- (CA INDEX NAME)

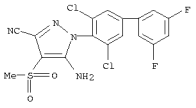


RN 207134-87-0 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-4-(methylsulfonyl)-1-[2',3,5,6'-tetrachloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]- (CA INDEX NAME)

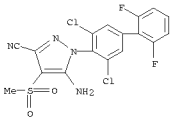


RN 207134-88-1 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-4'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]-4-(methylsulfonyl)- (CA INDEX NAME)

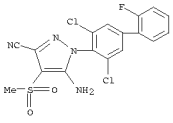
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
biphenyl]-4-yl)-4-(methylsulfonyl)- (CA INDEX NAME)



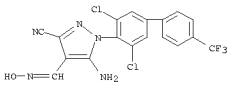
RN 207134-93-8 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-2',6'-difluoro[1,1'-biphenyl]-4-yl)-4-(methylsulfonyl)- (CA INDEX NAME)



RN 207134-94-9 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-2'-fluoro[1,1'-biphenyl]-4-yl)-4-(methylsulfonyl)- (CA INDEX NAME)

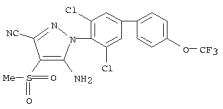


RN 207134-95-0 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-[(hydroxyimino)methyl]- (CA INDEX NAME)

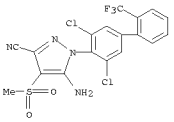


RN 207134-96-1 HCAPLUS
CN Acetamide, N-[3-cyano-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-nitro-1H-pyrazol-5-yl]- (CA INDEX NAME)

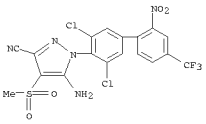
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



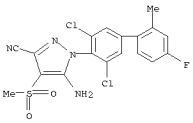
RN 207134-89-2 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-2'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-(methylsulfonyl)- (CA INDEX NAME)



RN 207134-90-5 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-2'-nitro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-(methylsulfonyl)- (CA INDEX NAME)

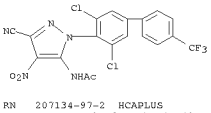


RN 207134-91-6 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-4'-fluoro-2'-methyl[1,1'-biphenyl]-4-yl)-4-(methylsulfonyl)- (CA INDEX NAME)

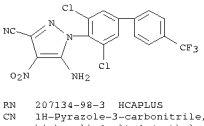


RN 207134-92-7 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-3',5'-difluoro[1,1'-

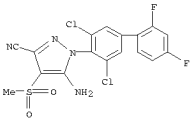
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



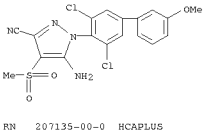
RN 207134-97-2 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-nitro- (CA INDEX NAME)



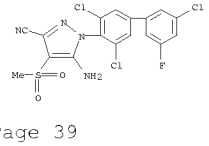
RN 207134-98-3 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-2',4'-difluoro[1,1'-biphenyl]-4-yl)-4-(methylsulfonyl)- (CA INDEX NAME)



RN 207134-99-4 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-3'-methoxy[1,1'-biphenyl]-4-yl)-4-(methylsulfonyl)- (CA INDEX NAME)

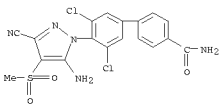


RN 207135-00-0 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-4-(methylsulfonyl)-1-(3,3',5-trichloro-5'-fluoro[1,1'-biphenyl]-4-yl)- (CA INDEX NAME)

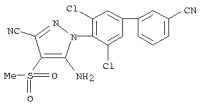


L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

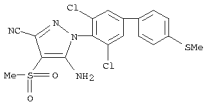
RN 207135-01-1 HCAPLUS
CN [1,1'-Biphenyl]-4-carboxamide, 4'-[5-amino-3-cyano-4-(methylsulfonyl)-1H-pyrazol-1-yl]-3',5'-dichloro- (CA INDEX NAME)



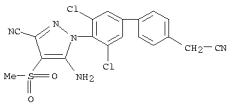
RN 207135-02-2 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-3'-cyano[1,1'-biphenyl]-4-yl)-4-(methylsulfonyl)- (CA INDEX NAME)



RN 207135-03-3 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-4'-(methylthio)[1,1'-biphenyl]-4-yl]-4-(methylsulfonyl)- (CA INDEX NAME)

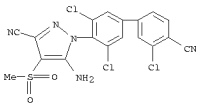


RN 207135-04-4 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-4'-(cyanomethyl)[1,1'-biphenyl]-4-yl]-4-(methylsulfonyl)- (CA INDEX NAME)

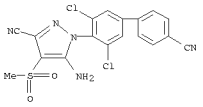


RN 207135-05-5 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-4'-(methylsulfonyl)[1,1'-biphenyl]-4-yl]-4-(methylsulfonyl)- (CA INDEX NAME)

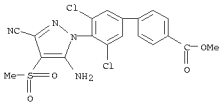
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



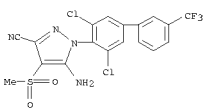
RN 207135-10-2 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-4'-cyano[1,1'-biphenyl]-4-yl)-4-(methylsulfonyl)- (CA INDEX NAME)



RN 207135-11-3 HCAPLUS
CN [1,1'-Biphenyl]-4-carboxylic acid, 4'-[5-amino-3-cyano-4-(methylsulfonyl)-1H-pyrazol-1-yl]-3',5'-dichloro-, methyl ester (CA INDEX NAME)

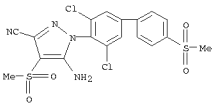


RN 207135-12-4 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[3,5-dichloro-3'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]-4-(methylsulfonyl)- (CA INDEX NAME)

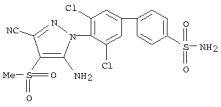


RN 207135-13-5 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-2',3',4',5',6'-pentafluoro[1,1'-biphenyl]-4-yl)-4-(methylsulfonyl)- (CA INDEX NAME)

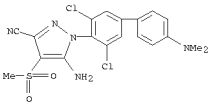
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



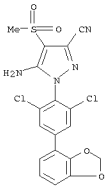
RN 207135-06-6 HCAPLUS
CN [1,1'-Biphenyl]-4-sulfonamide, 4'-[5-amino-3-cyano-4-(methylsulfonyl)-1H-pyrazol-1-yl]-3',5'-dichloro- (CA INDEX NAME)



RN 207135-07-7 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-4'-(dimethylamino)[1,1'-biphenyl]-4-yl]-4-(methylsulfonyl)- (CA INDEX NAME)

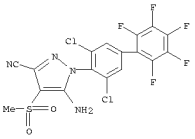


RN 207135-08-8 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[4-(1,3-benzodioxol-4-yl)-2,6-dichlorophenyl]-4-(methylsulfonyl)- (CA INDEX NAME)

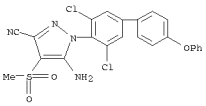


RN 207135-09-9 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-4-(methylsulfonyl)-1-(3,3',5-trichloro-4'-cyano[1,1'-biphenyl]-4-yl)- (CA INDEX NAME)

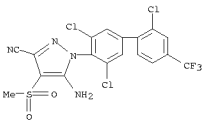
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



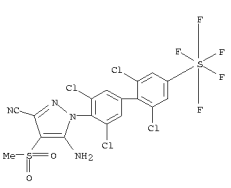
RN 207135-14-6 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-4'-phenoxy[1,1'-biphenyl]-4-yl)-4-(methylsulfonyl)- (CA INDEX NAME)



RN 207135-15-7 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-4-(methylsulfonyl)-1-[2',3,5-trichloro-4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]- (CA INDEX NAME)

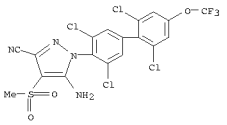


RN 207135-16-8 HCAPLUS
CN Sulfur, [4'-[5-amino-3-cyano-4-(methylsulfonyl)-1H-pyrazol-1-yl]-3,3',5,5'-tetrachloro[1,1'-biphenyl]-4-yl]pentafluoro-, (OC-6-21)- (9CI) (CA INDEX NAME)

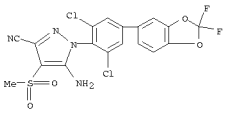


RN 207135-17-9 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-4-(methylsulfonyl)-1-[2',3,5,6'-

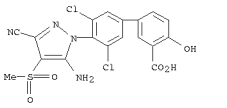
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
tetrachloro-4'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]- (CA INDEX NAME)



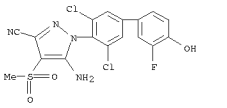
RN 207135-18-0 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-[2,6-dichloro-4-(2,2-difluoro-1,3-benzodioxol-5-yl)phenyl]-4-(methylsulfonyl)- (CA INDEX NAME)



RN 207135-19-1 HCAPLUS
CN [1,1'-Biphenyl]-3-carboxylic acid, 4'-(5-amino-3-cyano-4-(methylsulfonyl)-1H-pyrazol-1-yl]-3',5'-dichloro-4-hydroxy- (CA INDEX NAME)

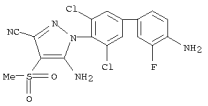


RN 207135-20-4 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-3'-fluoro-4'-hydroxy[1,1'-biphenyl]-4-yl)-4-(methylsulfonyl)- (CA INDEX NAME)

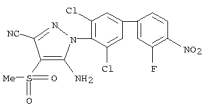


RN 207135-21-5 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(4'-amino-3,5-dichloro-3'-fluoro[1,1'-biphenyl]-4-yl)-4-(methylsulfonyl)- (CA INDEX NAME)

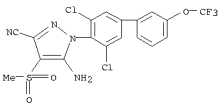
L46 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 207135-22-6 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-3'-fluoro-4'-nitro[1,1'-biphenyl]-4-yl)-4-(methylsulfonyl)- (CA INDEX NAME)



RN 207136-61-6 HCAPLUS
CN 1H-Pyrazole-3-carbonitrile, 5-amino-1-(3,5-dichloro-3'-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]-4-(methylsulfonyl)- (CA INDEX NAME)

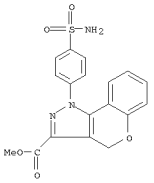


RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1996:446472 HCAPLUS
DN 125:114605
TI Preparation of cytokine-inhibiting benzopyranopyrazole antiinflammatories and analgesics
IN Talley, John J.; Bertenshaw, Stephen R.; Graneto, Matthew J.; Rogier, Donald J.
PA G.D. Searle and Co., USA
SO PCT Int. Appl., 195 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

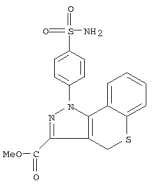
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI WO---9609304 | A1 | 19960328 | 1995WO-US11403 | 19950915 <-- |
| W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM | | | | |
| RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| US---5547975 | A | 19960820 | 1994US-0309291 | 19940920 <-- |
| AU---9535487 | A | 19960409 | 1995AU-0035487 | 19950915 <-- |
| US---5565482 | A | 19961015 | 1995US-0536925 | 19950929 <-- |
| US---5670532 | A | 19970923 | 1996US-0719501 | 19960925 <-- |
| US---5886016 | A | 19990323 | 1997US-0809475 | 19970609 <-- |
| PRAI 1994US-0309291 | A | 19940920 | | |
| 1995WO-US11403 | W | 19950915 | | |

OS CASREACT 125:114605; MARPAT 125:114605
GI For diagram(s), see printed CA Issue.
AB The title compds. [I; A = (CH2)nX(CH2)n; X = S(O)p, O; m, n, p = 0, 1; B = fused Ph or 5- and 6-membered heteroaryl; R1 = H, halogen, haloalkyl, cyano, hydroxyalkyl, formyl, alkoxycarbonyl, alkoxy, etc.; R2 = (un)substituted aryl or heteroaryl; R4 = H, halogen, alkylthio, alkylsulfinyl, alkyl, cyano, carboxyl, etc.], useful in treating inflammation and inflammation-related disorders, are prepared Thus, benzothiopyranopyrazolylbenzenesulfonamide II, m.p. 250-252°, prepared from 2-fluoroanisole in 8 steps, demonstrated 30% edema inhibition in a rat paw model at 30 mg/kg.
IT 178975-17-2P 178975-21-8P 178975-48-9P
178975-89-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of benzopyranopyrazolyl antiinflammatories and analgesics)
RN 178975-17-2 HCAPLUS
CN [1]Benzopyrano[4,3-c]pyrazole-3-carboxylic acid, 1-[4-(aminosulfonyl)phenyl]-1,4-dihydro-, methyl ester (CA INDEX NAME)

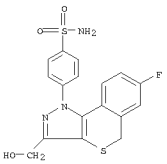


RN 178975-21-8 HCAPLUS
CN [1]Benzothiopyrano[4,3-c]pyrazole-3-carboxylic acid, 1-[4-(aminosulfonyl)phenyl]-1,4-dihydro-, methyl ester (CA INDEX NAME)

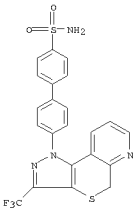
L46 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 178975-48-9 HCAPLUS
CN Benzenesulfonamide, 4-[7-fluoro-3-(hydroxymethyl)[2]benzothiopyrano[4,3-c]pyrazol-1(5H)-yl]- (CA INDEX NAME)

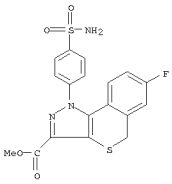


RN 178975-89-8 HCAPLUS
CN [1,1'-Biphenyl]-4-sulfonamide, 4'-[3-(trifluoromethyl)pyrazolo[3',4':5,6]thiopyrano[3,4-b]pyridin-1(5H)-yl]- (CA INDEX NAME)

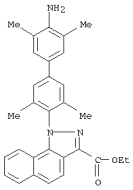


IT 178975-14-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of benzopyranopyrazolyl antiinflammatories and analgesics)
RN 178975-14-9 HCAPLUS
CN [2]Benzothiopyrano[4,3-c]pyrazole-3-carboxylic acid, 1-[4-(aminosulfonyl)phenyl]-7-fluoro-1,5-dihydro-, methyl ester (CA INDEX NAME)

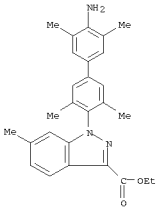
L46 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



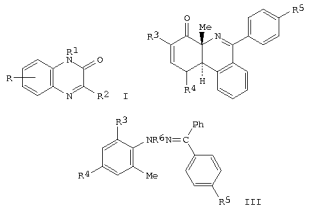
L46 ANSWER 7 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 119867-97-9 HCAPLUS
CN 1H-Indazole-3-carboxylic acid, 1-(4'-amino-3,3',5,5'-tetramethyl[1,1'-biphenyl]-4-yl)-6-methyl-, ethyl ester (CA INDEX NAME)



L46 ANSWER 7 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1989:154265 HCAPLUS
DN 110:154265
TI Rearrangements of aromatic carbonyl arylhydrazones of benzene, naphthalene, and azulene
AU Benincori, Tiziana; Brademante Pagani, Silvia; Fusco, Raffaello; Sannicolo, Franco
CS Dip. Chim. Org. Ind., Univ. Milano, Milan, 20133, Italy
SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1988), (10), 2721-8
CODEN: JCPRB4; ISSN: 0300-922X
DT Journal
LA English
OS CASREACT 110:154265
GI

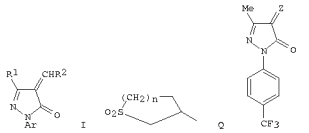


AB Aromatic carbonyl arylhydrazones undergo two kinds of rearrangement in polyphosphoric acid both involving N-N bond cleavage. The first proceeds via insertion of the imine portion in the position ortho to the second N atom to give o-phenylenediamine intermediates; their evolution depends on the nature of the starting substrate. This reaction was employed for synthesizing the quinoxalines I (R = H, 5,8-Me2; R1 = H, Me, Ph; R2 = Ph, CO2Et, 4-MeC6H4) and the phenanthridines II (R3, R4 = H, Me; R2 = H, Cl) from RC6H4NR1N:CR2CO2Et and hydrazones III (R3, R4, R6 = H, Me; R5 = H, Cl) resp. and was demonstrated to be intramol. The second reaction path is a [5,5] sigmatropic rearrangement exclusive to electron-rich aromatic carbonyl hydrazones.
IT 119867-86-6P 119867-97-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 119867-86-6 HCAPLUS
CN 1H-Benz[g]indazole-3-carboxylic acid, 1-(4'-amino-3,3',5,5'-tetramethyl[1,1'-biphenyl]-4-yl)-, ethyl ester (CA INDEX NAME)

L46 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1989:23881 HCAPLUS
DN 110:23881
TI Preparation of 4-(aminomethylene)-2-pyrazolin-5-ones as herbicides and fungicides
IN Gehring, Reinhold; Lindig, Markus; Wroblowsky, Heinz Juergen; Santel, Hans Joachim; Schmidt, Robert R.; Brandes, Wilhelm; Strang, Harry
PA Bayer A.-G., Fed. Rep. Ger.
SO Ger. Offen., 155 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

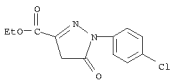
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI DE---3728278 | A1 | 19880623 | 1987DE-3728278 | 19870825 <-- |
| EP----274642 | A2 | 19880720 | 1987EP-0117732 | 19871201 <-- |
| EP----274642 | A3 | 19881005 | | |
| EP----274642 | B1 | 19930811 | | |
| R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL | | | | |
| AT-----92920 | T | 19930815 | 1987AT-0117732 | 19871201 <-- |
| ES---2058093 | T3 | 19941101 | 1987ES-0117732 | 19871201 <-- |
| US---4909827 | A | 19900320 | 1987US-0130380 | 19871208 <-- |
| AU----8782411 | A | 19880623 | 1987AU-0082411 | 19871210 <-- |
| JP---63165367 | A | 19880708 | 1987JP-0312439 | 19871211 <-- |
| ZA----8709399 | A | 19880831 | 1987ZA-0009399 | 19871215 <-- |
| DD----284154 | A5 | 19901107 | 1987DD-0310486 | 19871215 <-- |
| DK----8706617 | A | 19880618 | 1987DK-0006617 | 19871216 <-- |
| BR----8706838 | A | 19880726 | 1987BR-0006838 | 19871216 <-- |
| HU-----47545 | A2 | 19890328 | 1987HU-0005757 | 19871217 <-- |
| US----5028717 | A | 19910702 | 1989US-0433483 | 19891108 <-- |
| US----5162528 | A | 19921110 | 1991US-0650354 | 19910204 <-- |
| PRAI 1986DE-3643148 | A1 | 19861217 | | |
| 1987DE-3728278 | A | 19870825 | | |
| 1987EP-0117732 | A | 19871201 | | |
| 1987US-0130380 | A3 | 19871208 | | |
| 1989US-0433483 | A3 | 19891108 | | |

OS CASREACT 110:23881; MARPAT 110:23881
GI

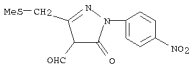


AB The title compds. [I; R1 = H, alkyl, cycloalkyl, (un)substituted alkenyl, alkynyl, heterocyclyl, etc.; R2 = (un)substituted amino, heterocyclyl; Ar = (un)substituted aryl, heterocyclyl, annelated heterocyclyl, Q; n = 1, 2] and their salts were prepared, except for the following: 1-(4-chlorophenyl)-3-methyl-4-(piperidinomethylene)-; -4-(morpholinomethylene)-; -4-[(p-fluoroanilino)methylene]-; and -4-(aminomethylene)-2-pyrazolin-5-one. A mixture of MeCOCH2CO2Et, 4-F3CC6H4NHNH2, and 4-MeC6H4SO3H was heated 24 h in PhMe with H2O separation to give 69.5% pyrazolinone II (Z = H2), reaction of which with H2NCH(OMe)2 in PhMe gave 82.6% II (Z = CHNMe2). The latter was treated with 30% MeNH2 to give 79.1% II (Z = CHNHMe). At 500 g/ha preemergence, II (Ar = 4-ClC6H4, R1 = Pr, R2 = NHMe) controlled weeds as follows: Amaranthus 100, Portulaca 95, Viola 95%, Sinapis 95, and Echinochloa 90%, with no effect on cotton and rice. I (Ar = 2,4,6-Cl3C6H2, R1 = Me, R2 = NH2) at 10 ppm was sprayed on tomato plants which were then inoculated with Phytophthora infestans. Of these plants, 10% had the disease after 3 days. I are more effective herbicides and fungicides than known pyrazolinone agents.
IT 55983-92-1P 118031-53-1P 118031-54-2P
118031-55-3P 118031-56-4P 118031-57-5P
118031-58-6P 118049-99-3P

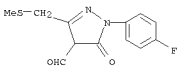
L46 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of, in synthesis of pyrazolinone herbicide or agrochem. fungicide)
RN 55983-92-1 HCAPLUS
CN 1H-Pyrazole-3-carboxylic acid, 1-(4-chlorophenyl)-4,5-dihydro-5-oxo-, ethyl ester (CA INDEX NAME)



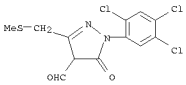
RN 118031-53-1 HCAPLUS
CN 1H-Pyrazole-4-carboxaldehyde, 4,5-dihydro-3-[(methylthio)methyl]-1-(4-nitrophenyl)-5-oxo- (CA INDEX NAME)



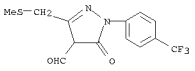
RN 118031-54-2 HCAPLUS
CN 1H-Pyrazole-4-carboxaldehyde, 1-(4-fluorophenyl)-4,5-dihydro-3-[(methylthio)methyl]-5-oxo- (CA INDEX NAME)



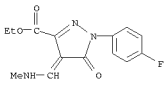
RN 118031-55-3 HCAPLUS
CN 1H-Pyrazole-4-carboxaldehyde, 4,5-dihydro-3-[(methylthio)methyl]-5-oxo-1-(2,4,5-trichlorophenyl)- (CA INDEX NAME)



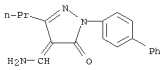
RN 118031-56-4 HCAPLUS
CN 1H-Pyrazole-4-carboxaldehyde, 4,5-dihydro-3-[(methylthio)methyl]-5-oxo-1-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)



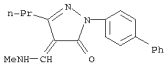
L46 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



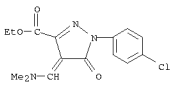
RN 118029-42-8 HCAPLUS
CN 3H-Pyrazol-3-one, 4-(aminomethylene)-2-[1,1'-biphenyl]-4-yl-2,4-dihydro-5-propyl- (CA INDEX NAME)



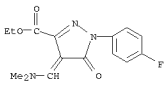
RN 118071-58-2 HCAPLUS
CN 3H-Pyrazol-3-one, 2-[1,1'-biphenyl]-4-yl-2,4-dihydro-4-[(methylamino)methylene]-5-propyl- (CA INDEX NAME)



IT 118031-11-1P 118048-41-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as herbicide or agrochem. fungicide, or intermediate thereof)
RN 118031-11-1 HCAPLUS
CN 1H-Pyrazole-3-carboxylic acid, 1-(4-chlorophenyl)-4-[(dimethylamino)methylene]-4,5-dihydro-5-oxo-, ethyl ester (CA INDEX NAME)



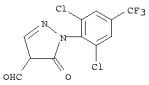
RN 118048-41-2 HCAPLUS
CN 1H-Pyrazole-3-carboxylic acid, 4-[(dimethylamino)methylene]-1-(4-fluorophenyl)-4,5-dihydro-5-oxo-, ethyl ester (CA INDEX NAME)



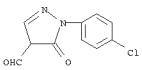
IT 118071-65-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in synthesis of herbicide or agrochem. fungicide)
RN 118071-65-1 HCAPLUS
CN 1H-Pyrazole-4-carboxaldehyde, 4,5-dihydro-3-methyl-5-oxo-1-(2,4,6-

L46 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

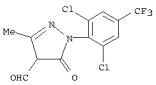
RN 118031-57-5 HCAPLUS
CN 1H-Pyrazole-4-carboxaldehyde, 1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4,5-dihydro-5-oxo- (CA INDEX NAME)



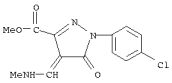
RN 118031-58-6 HCAPLUS
CN 1H-Pyrazole-4-carboxaldehyde, 1-(4-chlorophenyl)-4,5-dihydro-5-oxo- (CA INDEX NAME)



RN 118049-99-3 HCAPLUS
CN 1H-Pyrazole-4-carboxaldehyde, 1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4,5-dihydro-3-methyl-5-oxo- (CA INDEX NAME)

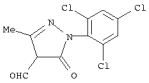


IT 118027-77-3P 118027-78-4P 118029-42-8P
118071-58-2P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as herbicide and agrochem. fungicide)
RN 118027-77-3 HCAPLUS
CN 1H-Pyrazole-3-carboxylic acid, 1-(4-chlorophenyl)-4,5-dihydro-4-[(methylamino)methylene]-5-oxo-, methyl ester (CA INDEX NAME)



RN 118027-78-4 HCAPLUS
CN 1H-Pyrazole-3-carboxylic acid, 1-(4-fluorophenyl)-4,5-dihydro-4-[(methylamino)methylene]-5-oxo-, ethyl ester (CA INDEX NAME)

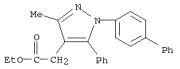
L46 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
trichlorophenyl)- (CA INDEX NAME)



L46 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1971:449072 HCAPLUS
DN 75:49072
OREF 75:7749a,7752a
TI Antiphlogistic, analgesic, and antipyretic substituted pyrazole-4-acetic acid derivatives
IN Rainer, Georg; Riedel, Richard; Klemm, Kurt
PA Byk-Gulden Lomberg Chemische Fabrik G.m.b.H.
SO Ger. Offen., 44 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 3

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI DE---1946370 | A | 19710422 | 1969DE-1946370 | 19690912 |
| DE---1946370 | B2 | 19781109 | | |
| DE---1946370 | C3 | 19790726 | | |
| CH----583707 | A5 | 19770114 | 1973CH-0003460 | 19700828 |
| CH----587251 | A5 | 19770429 | 1970CH-0012904 | 19700828 |
| GB---1307005 | A | 19730214 | 1970GB-0043147 | 19700909 |
| NL----7013384 | A | 19710316 | 1970NL-0013384 | 19700910 |
| CA----959838 | A1 | 19741224 | 1970CA-0092873 | 19700910 |
| SE----385212 | B | 19760614 | 1970SE-0012345 | 19700910 |
| ZA----7006215 | A | 19710527 | 1970ZA-0006215 | 19700911 |
| FR---2070689 | A5 | 19710917 | 1970FR-0033102 | 19700911 |
| FR---2070689 | A1 | 19710917 | | |
| AT----304534 | B | 19730110 | 1970AT-0008261 | 19700911 |
| AT----313274 | B | 19740211 | 1972AT-0001884 | 19700911 |
| JP---51033906 | B | 19760922 | 1970JP-0079421 | 19700911 |
| JP---53039435 | B | 19781021 | 1974JP-0062988 | 19740605 |
| US----4325962 | A | 19820420 | 1978US-0969872 | 19781215 |
| PRAI 1969DE-1946370 | A | 19690912 | | |
| 1970US-0072233 | A3 | 19700914 | | |

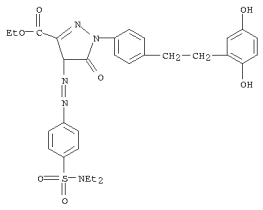
GI For diagram(s), see printed CA Issue.
AB The title compds. (I, R, R1, R2 = H, alkyl, allyl, cycloalkyl, and variously substituted phenyl and benzyl, R3 = H, Me) were prepared by the reaction of hydrazines RNHNH2 with dicarbonyl compds. R1CO(R2CO)CHCHR3CO2H (II) or by hydrolysis of esters, amides, nitriles, etc., of I. II were prepared by base-catalyzed condensation of 1,3-diketones with alkylbromoacetates. Forty examples were given and antiphlogistic and analgesic data reported.
IT 32701-89-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 32701-89-6 HCAPLUS
CN Pyrazole-4-acetic acid, 1-(4-biphenylyl)-3-methyl-5-phenyl-, ethyl ester (8CI) (CA INDEX NAME)



L46 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1967:518106 HCAPLUS
DN 67:118106
OREF 67:22307a,22310a
TI 1-(Hydroquinonylalkylphenyl)-3-carbethoxy-4-(arylazo)-5-pyrazolones
IN Green, Milton
PA Polaroid Corp.
SO U.S., 8 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

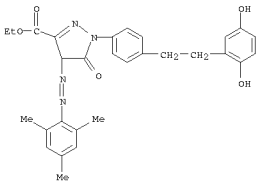
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI US---3306891 | | 19670228 | 1963US-0301198 | 19610810 <-- |

GI For diagram(s), see printed CA Issue.
AB The title compds. (I) are valuable for use in photosensitive halide elements. 2,4-Me2C6H3NH2 (2 g.) was diazotized and coupled with 3 g. 1-[p-(2,5-diacetoxyphenethyl)phenyl]-3-carbethoxy-5-pyrazolone. The product in 500 ml. MeOCH2CH2OH was treated with a stream of N for 20 min. at room temperature followed by an O-free solution of 0.65 g. NaOH in 25 ml. H2O, treated with N for 90 min., and precipitated with 10 ml. concentrated HCl to give I (R = 2,4-Me2C6H3, n = 2), m. 96-101°. The following I derivs. were similarly prepared (R, n, and m.p. given): 2,6-Me2C6H3, 2, 170-5°; 4-MeC6H4, 2, 207-11° (decomposition); 4-Et2NSO2C6H4, 2, 242-50° (decomposition); 2,5-Me2C6H3, 2, 185-8°; 1-C10H7, 2, 134-40°; 2-MeOC6H4, 2, 228-32°; 2,4-Cl(Me)C6H3, 2, 106-13°; 2,6-Et2C6H3, 2, 155-7°; 2,5-Me2C6H3, 2, 130-40°; 4,2-Cl(Me)C6H3, 2, 143-9°; 2,4-Me2C6H3, 0, 128-30°; 2,4-Me2C6H3, 3, 100-5°; and 2-F3CC6H4, 2, 110-18°; 2-Et2NSO2C6H4, 2, -.
IT 1654-21-3P 1654-23-5P 1654-24-6P
1654-25-7P 1654-26-8P 1697-81-0P
1697-82-1P 1697-83-2P 1697-84-3P
1697-85-4P 1697-86-5P 1697-87-6P
1830-89-3P 16317-39-8P 16317-46-7P
RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation of)
RN 1654-21-3 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 4-[[p-(diethylsulfamoyl]phenyl]azo]-1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

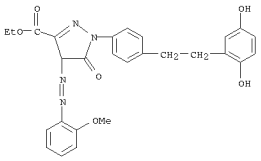


RN 1654-23-5 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-4-(mesitylazo)-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

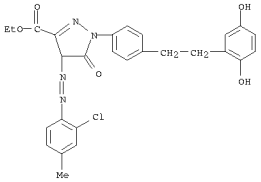
L46 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 1654-24-6 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-4-[(o-methoxyphenyl)azo]-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

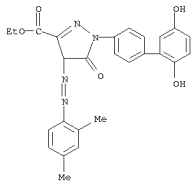


RN 1654-25-7 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 4-[(2-chloro-p-tolyl)azo]-1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

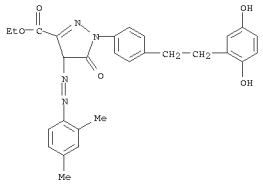


RN 1654-26-8 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-(2',5'-dihydroxy-4-biphenylyl)-5-oxo-4-(2,4-xylylazo)-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

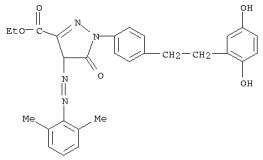
L46 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 1697-81-0 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-4-(2,4-xylylazo)-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

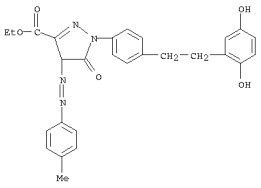


RN 1697-82-1 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-4-(2,6-xylylazo)-, ethyl ester (7CI, 8CI) (CA INDEX NAME)



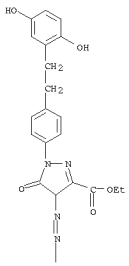
RN 1697-83-2 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-4-(p-tolylazo)-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

L46 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 1697-84-3 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-4-(1-naphthylazo)-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

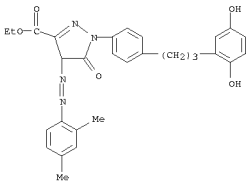
PAGE 1-A



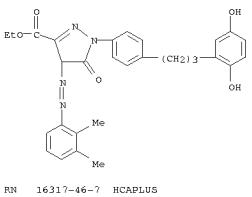
PAGE 2-A

RN 1697-85-4 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 4-[(2,6-diethylphenyl)azo]-1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

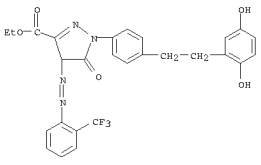
L46 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



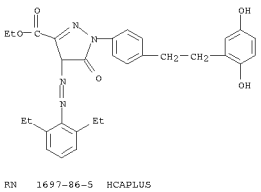
RN 16317-39-8 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-[3-(2,5-dihydroxyphenyl)propyl]phenyl]-5-oxo-4-(2,3-xylylazo)-, ethyl ester (8CI) (CA INDEX NAME)



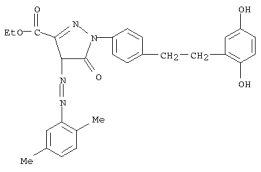
RN 16317-46-7 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-4-[(α,α,α-trifluoro-o-tolyl)azo]-, ethyl ester (7CI, 8CI) (CA INDEX NAME)



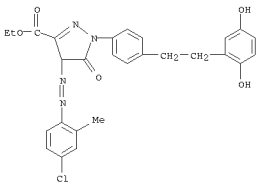
L46 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 1697-86-5 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-4-(2,5-xylylazo)-, ethyl ester (7CI, 8CI) (CA INDEX NAME)



RN 1697-87-6 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 4-[(4-chloro-o-tolyl)azo]-1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)



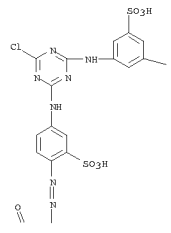
RN 1830-89-3 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-[3-(2,5-dihydroxyphenyl)propyl]phenyl]-5-oxo-4-(2,4-xylylazo)-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

L46 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1967:474461 HCAPLUS
DN 67:74461
ORER 67:14071a,14074a
TI Reactive azo dyes
PA Imperial Chemical Industries Ltd.
SO Fr., 6 pp.
CODEN: FRXXAK
DT Patent
LA French
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI FR---1463287 | | 19661223 | FR | <-- |
| DE---1644265 | | | DE | |
| GB---1116205 | | | GB | |
| US---3398133 | | 19680820 | 1965US-0517823 | 19651230 <-- |
| PRAI GB | | 19650108 | | |
| GB | | 19651220 | | |

GI For diagram(s), see printed CA Issue.
AB Sym. bispyrazolone azo dyes of the general structure I give fast orange dyeings on cotton. Thus, a neutral solution of 19.2 parts 2,4-(H2N)2C6H3SO3H in 250 parts H2O was added over 30 min. to a suspension of 18.9 parts cyanuric chloride (II) in 50 parts Me2CO and 200 parts H2O and ice at 0-5°. After 45 min. the solution was neutralized, treated with a solution of 25.3 parts 3,5-(HO3S)2C6H3NHNH2 (III) in 100 parts H2O, warmed to 30-5° for 4 hrs., holding pH at 7 with 2N Na2CO3, cooled to 0°, diazotized and coupled with 25.3 parts 4,4'-bis-(3"-methyl-5"-pyrazolon-1"-yl)biphenyl-2,2'-disulfonic acid (IV) to give I (X = Me, Y = 3,5-(HO3S)2C6H3NH (Q), Z = 4,1,3-HO3SC6H3). 2,5-H2N(AcNH)C6H3CO2H → II was deacetylated and the amine copperized and treated with II-III condensate to give an orange dye. Similarly, other I (X = CO2H) were prepared (Y and Z given): Q, 3,1,4-HO3SC6H3 (R); Cl, R; MeO, R; NH2, R; Q, m-C6H4. 6,2,4,8-AcNH(H2N)C10H4(SO3H)2 → 3"-carboxy analog of IV deacetylated and treated with 2,4-dichloro-6-(m-sulfoanilino)-s-triazine also gave an orange dye.
IT 16325-17-0P 16325-18-1P 16325-19-2P
16597-03-8P 29358-08-5P
RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation of)
RN 16325-17-0 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1,1'-(2,2'-disulfo-4,4'-biphenylylene)bis[4-[[4-[[4-chloro-6-(3,5-disulfoanilino)-s-triazin-2-yl]amino]-2-sulfophenyl]azo]-5-oxo- (8CI) (CA INDEX NAME)

PAGE 1-A

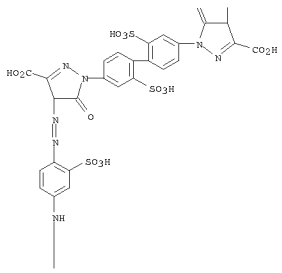


L46 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

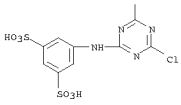
PAGE 1-B



PAGE 2-A



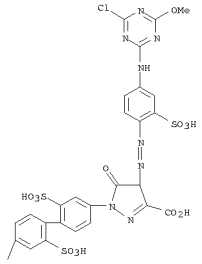
PAGE 3-A



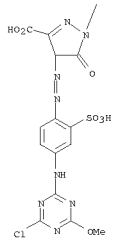
RN 16325-18-1 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1,1'-(2,2'-disulfo-4,4'-biphenylylene)bis[4-[[4-[(4-chloro-6-methoxy-s-triazin-2-yl)amino]-2-sulfophenyl]azo]-5-oxo- (8CI) (CA INDEX NAME)

L46 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



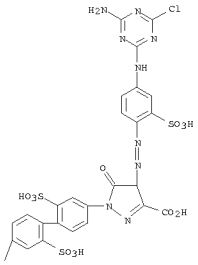
PAGE 2-A



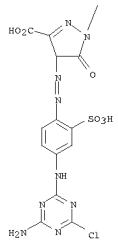
RN 16325-19-2 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1,1'-(2,2'-disulfo-4,4'-biphenylylene)bis[4-[[4-[(4-amino-6-chloro-s-triazin-2-yl)amino]-2-sulfophenyl]azo]-5-oxo- (8CI) (CA INDEX NAME)

L46 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



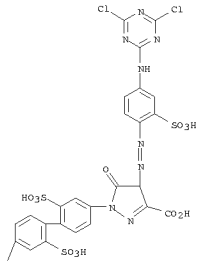
PAGE 2-A



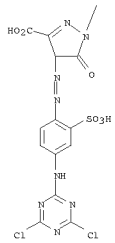
RN 16597-03-8 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1,1'-(2,2'-disulfo-4,4'-biphenylylene)bis[4-[[4-[(4,6-dichloro-s-triazin-2-yl)amino]-2-sulfophenyl]azo]-5-oxo- (8CI) (CA INDEX NAME)

L46 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



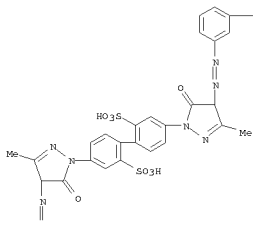
PAGE 2-A



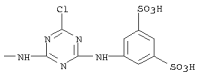
RN 29358-08-5 HCAPLUS
CN 2,2'-Biphenyldisulfonic acid, 4,4'-bis[4-[[[[4-chloro-6-(3,5-disulfoanilino)-s-triazin-2-yl]amino]sulfophenyl]azo]-3-methyl-5-oxo-2-pyrazolin-1-yl]- (8CI) (CA INDEX NAME)

L46 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

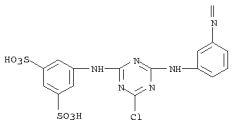
PAGE 1-A



PAGE 1-B



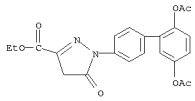
PAGE 2-A



L46 ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1966:439073 HCAPLUS
DN 65:39073
OREF 65:7332a-d
TI Catalysts for the silver dye-bleach process
PA CIBA Ltd.
SO 11 pp.
DT Patent
LA Unavailable
FAN.CNT 1

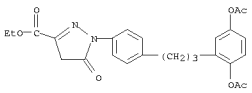
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI NL---6508680 | | 19660110 | 1965NL-0008680 | 19650706 <-- |
| BE----666473 | | | BE | |
| PRAI CH | | 19640707 | | |

GI For diagram(s), see printed CA Issue.
AB H2O-insol. acylamino derivs. of quinoxaline are bleach catalysts when present in ≥ 1 emulsion layer at a concentration of 5-100 mg./kg. of emulsion. In an example, I (R = Me, R' = CO) (II) was prepared by passing COCl2 into a solution of 35 g. 2,3-dimethyl-6-aminoquinoxaline in 1 l. C6H6 containing 37 ml. Me2NPh while stirring and boiling under reflux for 2 hrs. The product was filtered and washed to give II, a light gray powder m. 290° (decompose) (MeOH). Similarly prepared were I (R = Me, R' = COCH2CH2CO), a red powder, m. 280° (decompose); I (R = Me, R' = CO(CH2)6CO), a yellow powder, m. 195-200° (decompose); 6-nicotinamido-2,3-diphenylquinoxaline, a gray powder, m. 278-82° (decompose); and 2,3-dimethyl-6-(p-toluenesulfonamido)quinoxaline, a yellow powder, m. 200° (decompose). A 1% solution of II (40 ml.) in MeOH was added to 1 kg. of a red-sensitive, high-speed Ag(Br,I) emulsion which contained a cyan dye of formula III. The emulsion layer was coated on baryta paper and dried to give a thickness of 6 μ. The coating was exposed to red light and then developed in a Metol-hydroquinone developer. The material was then bleached for a few min. in 1 l. aqueous solution containing 100 g. KBr, 10 g. thiourea, and 70 ml. concentrated HCl. After washing the Ag image was rehalogenated in a solution of CuSO4 in HCl, and fixed in Na2S2O3 solution
IT 1654-20-2
(Derived from data in the 7th Collective Formula Index (1962-1966))
RN 1654-20-2 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-(2',5'-dihydroxy-4-biphenylyl)-5-oxo-, ethyl ester, diacetate (ester) (8CI) (CA INDEX NAME)



IT 1654-19-9P, 2-Pyrazoline-3-carboxylic acid, 1-[p-[3-(2,5-dihydroxyphenyl)propyl]phenyl]-5-oxo-, ethyl ester, diacetate (ester) 6670-20-8P, 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo- 6670-22-0P, 2-Pyrazoline-3-carboxylic acid, 1-(2',5'-dihydroxy-4-biphenylyl)-5-oxo-, ethyl ester 6775-29-7P, 2-Pyrazoline-3-carboxylic acid, 1-[p-[3-(2,5-dihydroxyphenyl]propyl]phenyl]-5-oxo-, ethyl ester
RL: PREP (Preparation)
(preparation of)
RN 1654-19-9 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-[3-(2,5-dihydroxyphenyl]propyl]phenyl]-5-oxo-, ethyl ester, diacetate (ester) (8CI) (CA INDEX NAME)

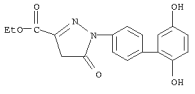
L46 ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



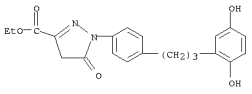
RN 6670-20-8 HCAPLUS
CN 1H-Pyrazole-3-carboxylic acid, 1-[4-[2-(2,5-dihydroxyphenyl)ethyl]phenyl]-4,5-dihydro-5-oxo- (CA INDEX NAME)



RN 6670-22-0 HCAPLUS
CN 1H-Pyrazole-3-carboxylic acid, 1-(2',5'-dihydroxy[1,1'-biphenyl]-4-yl)-4,5-dihydro-5-oxo-, ethyl ester (CA INDEX NAME)



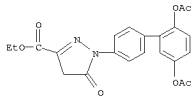
RN 6775-29-7 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-[3-(2,5-dihydroxyphenyl]propyl]phenyl]-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)



L46 ANSWER 13 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1966:439072 HCAPLUS
DN 65:39072
OREF 65:7331f-h,7332a
TI Pyrazolone derivatives
IN Green, Milton; Moore, Phylis
PA Polaroid Corp.
SO 6 pp.
DT Patent
LA Unavailable
FAN.CNT 1

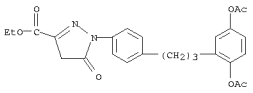
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI US---3252990 | | 19660524 | 1964US-0412221 | 19610810 <-- |
| PRAI US | | 19610810 | | |

AB The title compds. (I), are useful as azo couplers and as photographic developing agents. 2,5-(AcO)2C6H3CH2CH2C6H4NH2-4.HCl (34.9 g.) was diazotized and coupled with 21 g. EtO2CCH2CHAcCO2Et to give I (R = OEt, R' = Ac, n = 2) (II), m. 179-82°. A mixture of 15.35 g. II and 75 cc. n-C6H13NH2 was refluxed under N 15 hrs. to give I (R = NHC6H13, R' = H, n = 2), m. 136-40°. A suspension of 9.04 g. II in 100 cc. EtOH was stirred under N, cooled to -5°, treated during 5 min. with a solution of 6.0 g. NaOH in 100 ml. H2O (previously deoxygenated), stirred 1 hr. at -3° to 3°, and acidified with 12.5 ml. 12N HCl in 500 ml. H2O to give 3.5 g. I (R = OEt, R' = H, n = 2), m. 110-14°. A solution of 20 g. NaOH in 200 ml. H2O was deoxygenated with N for 20 min., treated with 9.04 g. II and heated 3 hrs. on the steam bath. The cooled solution was acidified with 150 cc. 10% HCl to give I (R = OH, R' = H, n = 2) decompose 185°. The following I derivs. were similarly prepared (R, R', n, and m.p. given): OEt, Ac, 3, 148-52°; OEt, Ac, 0, 175-9°; OEt, H, 3, --; OEt, H, 0, --.
IT 1654-20-2
(Derived from data in the 7th Collective Formula Index (1962-1966))
RN 1654-20-2 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-(2',5'-dihydroxy-4-biphenylyl)-5-oxo-, ethyl ester, diacetate (ester) (8CI) (CA INDEX NAME)

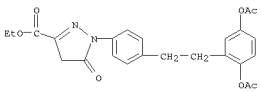


IT 1654-19-9P, 2-Pyrazoline-3-carboxylic acid, 1-[p-[3-(2,5-dihydroxyphenyl]propyl]phenyl]-5-oxo-, ethyl ester, diacetate (ester) 1697-80-9P, 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-, ethyl ester, diacetate (ester) 6670-19-5P, 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-, ethyl ester 6670-20-8P, 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo- 6670-22-0P, 2-Pyrazoline-3-carboxylic acid, 1-(2',5'-dihydroxy-4-biphenylyl)-5-oxo-, ethyl ester 6775-29-7P, 2-Pyrazoline-3-carboxylic acid, 1-[p-[3-(2,5-dihydroxyphenyl]propyl]phenyl]-5-oxo-, ethyl ester
RL: PREP (Preparation)
(preparation of)
RN 1654-19-9 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-[3-(2,5-dihydroxyphenyl]propyl]phenyl]-5-oxo-, ethyl ester, diacetate (ester) (8CI) (CA INDEX NAME)

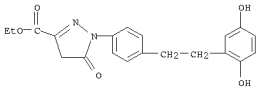
L46 ANSWER 13 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



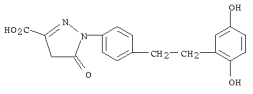
RN 1697-80-9 HCAPLUS
CN 1H-Pyrazole-3-carboxylic acid, 1-{4-[2-[2,5-bis(acetyloxy)phenyl]ethyl]phenyl}-4,5-dihydro-5-oxo-, ethyl ester (CA INDEX NAME)



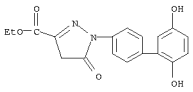
RN 6670-19-5 HCAPLUS
CN 1H-Pyrazole-3-carboxylic acid, 1-{4-[2-(2,5-dihydroxyphenyl)ethyl]phenyl}-4,5-dihydro-5-oxo-, ethyl ester (CA INDEX NAME)



RN 6670-20-8 HCAPLUS
CN 1H-Pyrazole-3-carboxylic acid, 1-{4-[2-(2,5-dihydroxyphenyl)ethyl]phenyl}-4,5-dihydro-5-oxo- (CA INDEX NAME)

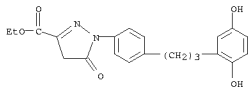


RN 6670-22-0 HCAPLUS
CN 1H-Pyrazole-3-carboxylic acid, 1-(2',5'-dihydroxy[1,1'-biphenyl]-4-yl)-4,5-dihydro-5-oxo-, ethyl ester (CA INDEX NAME)



L46 ANSWER 13 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 677S-29-7 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-[3-(2,5-dihydroxyphenyl)propyl]phenyl]-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)



L46 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN

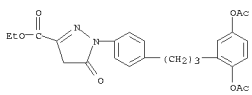
AN 1965:417330 HCAPLUS
DN 63:17330
OREF 63:3094a-f
TI Dyes for color-photographic transfer images
IN Green, Milton; Moore, Phylis
PA International Polaroid Corp.
SO 47 pp.
DT Patent
LA Unavailable
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| PI BE----621310 | | 19630211 | BE | <-- |
| GB---1005237 | | | GB | |
| GB---1005238 | | | GB | |
| PRAI US | | 19610810 | | |

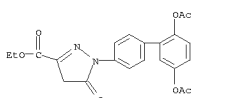
GI For diagram(s), see printed CA Issue.
AB Color couplers of the general formula I were prepared p-{2,5-(AcO)2C6H3CH2CH2|C6H4NH2.HCl (34.9 g.) in 200 cc. H2O and 20 cc. concentrated HCl was diazotized, added slowly to 21 g. di-Et acetosuccinate (II) in 750 cc. pyridine during 0.5 hr., kept 20 hrs. at room temperature, and acidified, with cooling, with 800 cc. concentrated HCl to give 23.2 g. III (X = OEt, n = 2) (IV), m. 179–82°. p-{2,S(AcO)2C6H3(CH2)3|C6H4NH2.HCl diazotized and coupled with II gave similarly III (X = OEt, n = 3) (V), m. 148–52°. Similarly was prepared III (X = OEt, n = 0) (VI), m. 175–9°. 2,4-Me2C6H3NH2(2 g.) diazotized and coupled with IV yielded I (A = 2,4-Me2C6H3, X = OEt, n = 2) (VII), m. 96–101°. Similarly were prepared the following I (X = OEt, n = 2) (A and m.p. given): 2,6-Me2C6H3, 170–5°; p-MeC6H4 (VIII), 207–11° (decomposition); p-Et2NSO2C6H4, 242–5° (decomposition); 2,3-Me2C6H3, 115–22° (decomposition); 2,4,6-Me3C6H2(IX), 185–8°; 1-C10H7, 134–40°; o-MeOC6H4, 228–32°; 2,4-ClMeC6H3, 106–13°; 2,6-Et2C6H3, 155–7°; 2,5-Me2C6H3, 130–40°; 4,2-ClMeC6H3, 143–9°. Similarly were prepared I (A = 2,3-Me2C6H3, X = OEt, n = 3), m. 100–5°; I(A = 2,4-Me2C6H3, X = OEt, n = 0), m. 128–30°; I (A = 2,4-Me2C6H3, X = OEt, n = 3), m. 100–5°. VIII (5.84 g.) and 30 cc. EtNH2 heated overnight in a sealed bomb under N on the water bath and acidified with dilute HCl yielded I (A = 2,4-Me2C6H3, X = NHEt, n = 2), m. 245° (decomposition). Similarly were prepared the following I (A = 2,4,6-Me3C6H2, n = 2) (X, m.p., and λmaximum. in mμ and ε given): NHMe, 206–7° (decomposition), 438, 18,100; NMe2, 210–11° (decomposition), 415, 18,800; piperidino, 219–21°, 412, 19,000; NH2, 201.5–2.5°, 440, 17,400; NEt2, --, --, --. IX (0.089 g.) in 10 cc. 2% cellulose acetate hydrophthalate in 1:1 tetrahydrofuran-Me2CO coated onto a gelatin layer on a support, the resulting element coated with a AgBr-AgI emulsion sensitized for blue, exposed, brought in face-to-face contact with an image-receiving layer of a 2:1 mixture of poly(vinyl alc.) and poly(4-vinylpyridine) on a baryta paper, a solution of NaOH 5.17, high-viscosity hydroxyethyl cellulose 4.03, Na2S2O3 1.15, benzotriazole 2.3, and N-benzyl-α-picolinium bromide 2.3 g. in 100 cc. H2O spread between the 2 elements, and the elements separated after 1 min. gave a yellow, pos. image. The color developer can also be contained in a gelatin layer. An example is given for the production of a yellow transfer image using I (A = 2,4,6-Me3C6H2, X = NHEt, n = 2) as the color coupler.
IT 1654-19-9P, 2-Pyrazoline-3-carboxylic acid, 1-[p-[3-(2,5-dihydroxyphenyl)propyl]phenyl]-5-oxo-, ethyl ester, diacetate (ester) 1654-20-2P, 2-Pyrazoline-3-carboxylic acid, 1-(2',5'-dihydroxy-4-biphenylyl)-5-oxo-, ethyl ester, diacetate (ester) 1654-21-3P, 2-Pyrazoline-3-carboxylic acid, 4-[[p-(diethylsulfamoyl)phenyl]azo]-1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-, ethyl ester 1654-22-4P, 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-4-(2,3-xylylazo)-, ethyl ester 1654-23-5P, 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-4-(mesitylazo)-5-oxo-, ethyl ester 1654-24-6P, 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-4-[(o-methoxyphenyl)azo]-5-oxo-, ethyl ester 1654-25-7P, 2-Pyrazoline-3-carboxylic acid, 4-[(2-chloro-p-tolyl)azo]-1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-, ethyl ester 1654-26-8P, 2-Pyrazoline-3-carboxylic acid, 1-(2',5'-dihydroxy-4-biphenylyl)-5-oxo-4-(2,4-xylylazo)-, ethyl ester 1697-80-9P, 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-, ethyl ester, diacetate (ester) 1697-81-0P, 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-4-(2,4-xylylazo)-, ethyl ester 1697-82-1P, 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-

L46 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

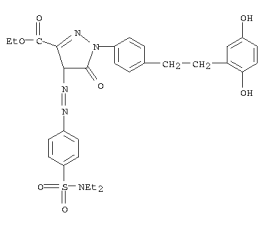
dihydroxyphenethyl)phenyl]-5-oxo-4-(2,6-xylylazo)-, ethyl ester 1697-83-2P, 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-4-(p-tolylazo)-, ethyl ester 1697-84-3P, 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-4-(1-naphthylazo)-5-oxo-, ethyl ester 1697-85-4P, 2-Pyrazoline-3-carboxylic acid, 4-[(2,6-diethylphenyl)azo]-1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-, ethyl ester 1697-86-5P, 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-4-(2,5-xylylazo)-, ethyl ester 1697-87-6P, 2-Pyrazoline-3-carboxylic acid, 4-[(4-chloro-o-tolyl)azo]-1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-, ethyl ester 1830-89-3P, 2-Pyrazoline-3-carboxylic acid, 1-[p-[3-(2,5-dihydroxyphenyl]propyl]phenyl]-5-oxo-4-(2,4-xylylazo)-, ethyl ester RL: PREP (Preparation)
(prepn. of)
RN 1654-19-9 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-[3-(2,5-dihydroxyphenyl)propyl]phenyl]-5-oxo-, ethyl ester, diacetate (ester) (8CI) (CA INDEX NAME)



RN 1654-20-2 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-(2',5'-dihydroxy-4-biphenylyl)-5-oxo-, ethyl ester, diacetate (ester) (8CI) (CA INDEX NAME)

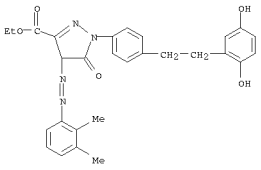


RN 1654-21-3 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 4-[[p-(diethylsulfamoyl)phenyl]azo]-1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

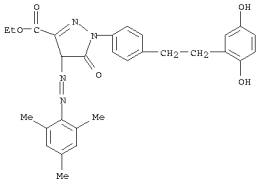


RN 1654-22-4 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-

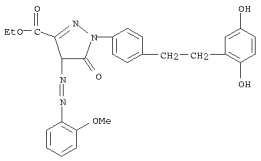
L46 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
4-(2,3-xylylazo)-, ethyl ester (7CI, 8CI) (CA INDEX NAME)



RN 1654-23-5 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-4-(mesitylazo)-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

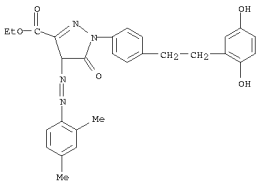


RN 1654-24-6 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-4-[(o-methoxyphenyl)azo]-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

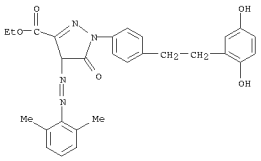


RN 1654-25-7 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 4-[(2-chloro-p-tolyl)azo]-1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

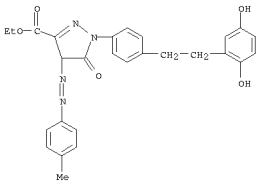
L46 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 1697-82-1 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-4-(2,6-xylylazo)-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

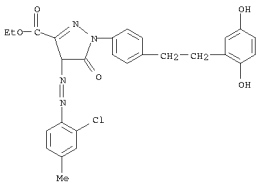


RN 1697-83-2 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-4-(p-tolylazo)-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

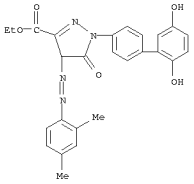


RN 1697-84-3 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-4-(1-naphthylazo)-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

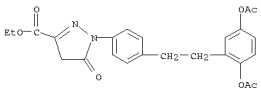
L46 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 1654-26-8 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-(2',5'-dihydroxy-4-biphenylyl)-5-oxo-4-(2,4-xylylazo)-, ethyl ester (7CI, 8CI) (CA INDEX NAME)



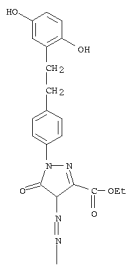
RN 1697-80-9 HCAPLUS
CN 1H-Pyrazole-3-carboxylic acid, 1-[4-[2-[2,5-bis(acetyloxy)phenyl]ethyl]phenyl]-4,5-dihydro-5-oxo-, ethyl ester (CA INDEX NAME)



RN 1697-81-0 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-4-(2,4-xylylazo)-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

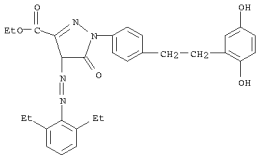
L46 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



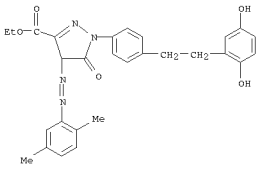
PAGE 2-A

RN 1697-85-4 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 4-[(2,6-diethylphenyl)azo]-1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

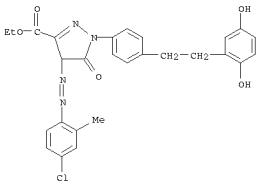


RN 1697-86-5 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-4-(2,5-xylylazo)-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

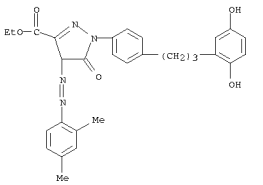
L46 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 1697-87-6 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 4-[(4-chloro-o-tolyl)azo]-1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

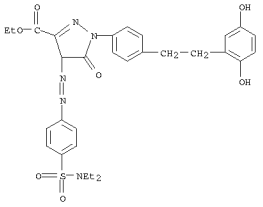


RN 1830-89-3 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-[3-(2,5-dihydroxyphenyl)propyl]phenyl]-5-oxo-4-(2,4-xylylazo)-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

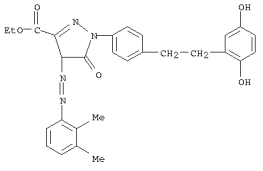


L46 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RL: PREP (Preparation)
(prepn. of)

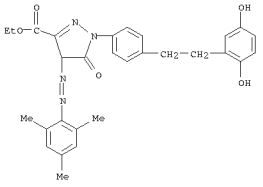
RN 1654-21-3 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 4-[[p-(diethylsulfamoyl)phenyl]azo]-1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)



RN 1654-22-4 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-4-(2,3-xylylazo)-, ethyl ester (7CI, 8CI) (CA INDEX NAME)



RN 1654-23-5 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-4-(mesitylazo)-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)



RN 1654-24-6 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-4-[(o-

L46 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN

AN 1964:477097 HCAPLUS
DN 61:77097
OREF 61:13464g-h,13465a-b
TI Azo dye developers
IN Green, Milton
PA Polaroid Corp.
SO 17 pp.
DT Patent
LA Unavailable
FAN.CNT 1

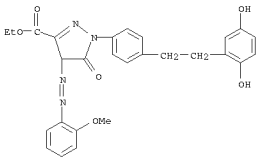
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|---|
| PI | US---3141772 | | 19640721 | 1963US-0301181 | 19630809 <-- |
| PRAI | US | | 19630809 | | |

GI For diagram(s), see printed CA Issue.

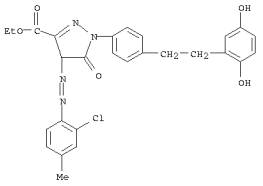
AB Dyes of general formula I are useful as yellow dye developers for transfer photographic processing. Thus, 2 g. 2,4-Me2C6H3NH2 was diazotized and coupled with 3 g. 1-[p-(2,5-diacetoxyphen-ethyl)phenyl]-3-carbethoxy-5-pyrazolone (II), the product hydrolyzed with aqueous NaOH in the absence of O, and reacidified to yield I(A = Z = Me, Y = R = E = H,X = EtO, n = 2), m. 96-101°. Similarly, other I (X = OEt) were prepared (A, Y, Z, R,E,n, and m.p. given): Me, H, H, H, Me, 2, 170-5°; H,H, Me, H, H, 2 (III), 207-11° (decompose); H, H, SO2NEt2, H, H, 2, 242-45° (decompose); Me, Me, H, H, H, 2, 115-22° (decompose); Me, H, Me, H, H, 3, 100-5°; Me, H, Me, H, Me, 2, 185-8°; CH:CHCH:CH (A + Y), H, H, H, 2, 134-40°; MeO, H, H, H, H, 2, 228-32°; Cl, H, Me, H, H, 2, 106 13 Et, H, H, H, Et, 2, 155-7°; Me, H, H, Me, H, 2, 130-40°; Me, H, Cl, H, H, 2, 143-9°; Me, H, Me, H, H, 0, 128-30°; Me, H, Me, H, H, 3, 100-05°; CF3, H, H, H, H, 2, 110-18°. III(5.84g.) and 30 ml. EtNH2 combined in a 100 ml. stainless steel bomb, heated over night at steam bath temperature, the excess amine removed with a stream of N, and the mixture acidified with dilute HCl gave I (A = Y = D = E = H, Z = Me, X = EtNH, n = 2),decompose 245°. Similarly, other I (A = Z = E = Me, Y = R = H) were prepared (X, n, m.p., λmaximum in mμ, and ε given): MeNH, 2, 206-07° (decompose), 438, 18,100; Me2N, 2, 210-11° (decompose), 415, 18,800; N-piperidinyl, 2, 219-21°, 412, 19,000; NH2, 2, 201.5-2.5°, 440, 17,400; HO(CH2)3NH, 3, 162-4°, -,-; PrNH, 2, 115-17°, -, -; NHC(CH2OH)2Me, 3, 135-40°, -, -; MeCH(OH)CH2NH, 2, 206-7°, -, -.

IT 1654-21-3P, 2-Pyrazoline-3-carboxylic acid, 4-[[p-(diethylsulfamoyl)phenyl]azo]-1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-, ethyl ester 1654-22-4P, 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-4-(2,3-xylylazo)-, ethyl ester 1654-23-5P, 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-4-(mesitylazo)-5-oxo-, ethyl ester 1654-24-6P, 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-4-[(o-methoxyphenyl)azo]-5-oxo-, ethyl ester 1654-25-7P, 2-Pyrazoline-3-carboxylic acid, 4-[(2-chloro-p-tolyl)azo]-1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-, ethyl ester 1654-26-8P, 2-Pyrazoline-3-carboxylic acid, 1-(2',5'-dihydroxy-4-biphenylyl)-5-oxo-4-(2,4-xylylazo)-, ethyl ester 1697-81-0P, 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-4-(2,4-xylylazo)-, ethyl ester 1697-82-1P, 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-4-(2,6-xylylazo)-, ethyl ester 1697-83-2P, 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-4-(p-tolylazo)-, ethyl ester 1697-84-3P, 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-4-(1-naphthylazo)-5-oxo-, ethyl ester 1697-85-4P, 2-Pyrazoline-3-carboxylic acid, 4-[(2,6-diethylphenyl)azo]-1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-, ethyl ester 1697-86-5P, 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-4-(2,5-xylylazo)-, ethyl ester 1697-87-6P, 2-Pyrazoline-3-carboxylic acid, 4-[(4-chloro-o-tolyl)azo]-1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-, ethyl ester 1830-89-3P, 2-Pyrazoline-3-carboxylic acid, 1-[p-[3-(2,5-dihydroxyphenyl)propyl]phenyl]-5-oxo-4-(2,4-xylylazo)-, ethyl ester 16317-46-7P, 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-4-[(α,α,α-trifluoro-o-tolyl)azo]-, ethyl ester

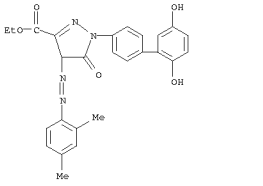
L46 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
methoxyphenyl)azo]-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)



RN 1654-25-7 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 4-[(2-chloro-p-tolyl)azo]-1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

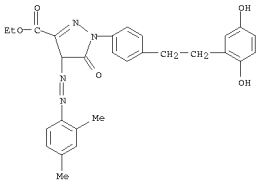


RN 1654-26-8 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-(2',5'-dihydroxy-4-biphenylyl)-5-oxo-4-(2,4-xylylazo)-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

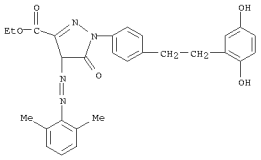


RN 1697-81-0 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-4-(2,4-xylylazo)-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

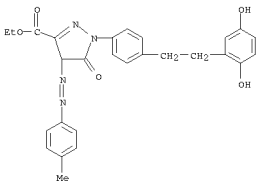
L46 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 1697-82-1 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-4-(2,6-xylylazo)-, ethyl ester (7CI, 8CI) (CA INDEX NAME)



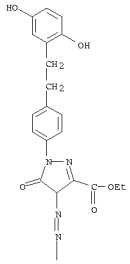
RN 1697-83-2 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-4-(p-tolylazo)-, ethyl ester (7CI, 8CI) (CA INDEX NAME)



RN 1697-84-3 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-4-(1-naphthylazo)-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

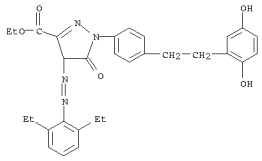
L46 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



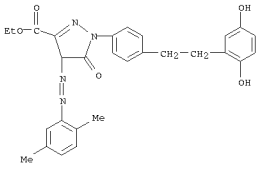
PAGE 2-A

RN 1697-85-4 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 4-[(2,6-diethylphenyl)azo]-1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

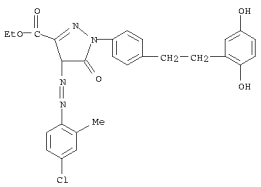


RN 1697-86-5 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-4-(2,5-xylylazo)-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

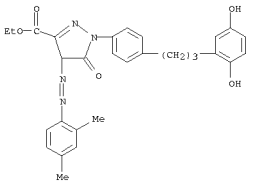
L46 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 1697-87-6 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 4-[(4-chloro-o-tolyl)azo]-1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

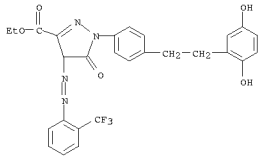


RN 1830-89-3 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-[3-(2,5-dihydroxyphenyl)propyl]phenyl]-5-oxo-4-(2,4-xylylazo)-, ethyl ester (7CI, 8CI) (CA INDEX NAME)



RN 16317-46-7 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[p-(2,5-dihydroxyphenethyl)phenyl]-5-oxo-4-[(α,α,α-trifluoro-o-tolyl)azo]-, ethyl ester (7CI, 8CI) (CA INDEX NAME)

L46 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



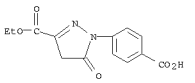
L46 ANSWER 16 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1948:972 HCAPLUS
DN 42:972
OREF 42:224a-g
TI 5-Pyrazolones
IN Kendall, John David; Fry, Douglas James
DT Patent
LA Unavailable
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| GB----585780 | | 19470224 | 1944GB-0023983 | 19441201 <-- |

AB Substituted 5-pyrazolones are obtained by the action of diazonium compds. under alkaline conditions on compds. of the type RR'CHCH2CO2R'', where R and R' are groups which promote enolization involving the CH to which they are attached, such as Ac, CN, CO2Et, and PhNHCO. In the reaction R or R' is displaced by the diazonium group and the product rearranges and condenses internally to form a 5-pyrazolone. Side reaction to form azo dyes is minimized by the use of weak alkali, such as Na2CO3, NaZB4O7, NaOAc, or amines, and by avoiding a large excess of the diazonium compound AcCH(CO2Et)CH2CO2Et (I) (0.1 mol) in 50 ml. EtOH was treated with the diazonium compound from 0.1 mol PhNH2 (II) and 20 g. powdered anhydrous NaOAc (or Na2B4O7 or Na2CO3). The oil which separated on standing was extracted with Et2O, distilled to remove Et2O, taken up in 200 ml. H2O, extracted with Et2O, and the aqueous layer acidified. 1-Phenyl-3-carbethoxy-5-pyrazolone (III), m. 180°, separated III was also obtained by using 200 ml. 50% aqueous C5H5N or Et3N in place of the EtOH and NaOAc. I (0.1 mol) in 200 ml. 50% aqueous C5H5N with 0.05 mol. tetrazotized p,p'-(C6H4NH2)2 gave 1,1-(p,p'-biphenylene)bis[3-carbethoxy-5-pyrazolone] (IV), m. 250°. Substitution of AcCH(CO2Me)CH2CO2Et for I in the reaction with diazotized II gave 1-phenyl-3-carbomethoxy-5-pyrazolone, m. 196°. Substitution of Ac2CHCH2CO2Et for I in reaction with diazotized II gave 1-phenyl-3-acetyl-5-pyrazolone, m. 118°. Substitution of NCCH(CO2Et)CH2CO2Et or CH(CO2Et)2CH2CO2Et for I in the reaction with diazotized II, followed by hydrolysis of the product with boiling 10% NaOH, gave 1-phenyl-3-carboxy-5-pyrazolone, m. 241°. Substitution of o-ClC6H4NHCOCH2CH(CO2Et)Ac (V) for I in the reaction with diazotized II gave the o-chloroanilide of 1-phenyl-3-carboxy-5-pyrazolone, m. 82°. V, m. 156°, was obtained by the reaction of the Na salt of o-ClC6H4NHCOCH2Ac with ClCH2CO2Et in EtOH. Substitution of 1-C10H7NH2 for II in the reaction with I, followed by hydrolysis with hot 50% NaOH, gave 1-(1-naphthyl)-3-carboxy-5-pyrazolone, m. 264° (decomposition). Similarly 2-C10H7NH2 gave 1-(2-naphthyl)-3-carboxy-5-pyrazolone, m. 264° (decomposition). Diazotized p-H2NC6H4SO2NH2 and I gave 1-p-sulfamylphenyl-3-carbethoxy-5-pyrazolone, m. 197°; diazotized p-H2NC6H4CO2H and I gave 1-(p-carboxyphenyl)-3-carbethoxy-5-pyrazolone, m. 152°; and diazotized p-O2NC6H4NH2 and I gave 1-(p-nitrophenyl)-3-carbethoxy-5-pyrazolone, m. 288°.

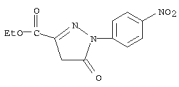
IT 137566-04-2P, 2-Pyrazoline-3-carboxylic acid, 1-(p-carboxyphenyl)-5-oxo-, 3-ethyl ester 389076-25-9P, 2-Pyrazoline-3-carboxylic acid, 1-(p-nitrophenyl)-5-oxo-, ethyl ester 856613-08-6P, 2-Pyrazoline-3-carboxylic acid, 5-oxo-1-p-sulfamoylphenyl-, ethyl ester 857185-39-8P, 2-Pyrazoline-3-carboxylic acid, 1,1'-(4,4'-biphenylene)bis[5-oxo-, diethyl ester 857217-04-0P, 2-Pyrazoline-3-carboxylic acid, 1-[2-naphthyl]-5-oxo-
RL: PREP (Preparation)
(preparation of)

RN 137566-04-2 HCAPLUS
CN 1H-Pyrazole-3-carboxylic acid, 1-(4-carboxyphenyl)-4,5-dihydro-5-oxo-, ethyl ester (CA INDEX NAME)

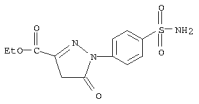


L46 ANSWER 16 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)

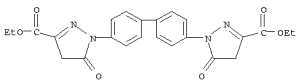
RN 389076-25-9 HCAPLUS
CN 1H-Pyrazole-3-carboxylic acid, 4,5-dihydro-1-(4-nitrophenyl)-5-oxo-, ethyl ester (CA INDEX NAME)



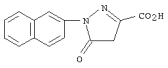
RN 856613-08-6 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 5-oxo-1-(p-sulfamoylphenyl)-, ethyl ester (7CI) (CA INDEX NAME)



RN 857185-39-8 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1,1'-(4,4'-biphenylene)bis[5-oxo-, diethyl ester (5CI) (CA INDEX NAME)



RN 857217-04-0 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-[2-naphthyl]-5-oxo- (5CI) (CA INDEX NAME)



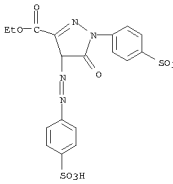
L46 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1943:14455 HCAPLUS
DN 37:14455
OREF 37:2347i,2348a-i,2349a-c
TI Reaction between aromatic diazo compounds and compounds of the type of alkylacetoacetic esters
AU Feofilaktov, V. V.
SO Bull. acad. sci. U. R. S. S., Classe sci. chim. (1941) 521-30
DT Journal
LA English
GI For diagram(s), see printed CA Issue.

AB The reaction between aromatic diazo compds. with compds. of the alkylacetoacetic ester type was investigated further. It was shown that this reaction is quite general and has many practical applications: it was used as a basis for a new synthesis of α-amino acids, derivs. of 5-pyrazolone and esters of cyclic β-keto acids, as well as cyclic β-keto nitriles. In the previously published results (C. A. 34, 1971.1, 72835.6; 35, 36066), high-yield syntheses were presented for alanine, valine, leucine, isoleucine and phenylalanine. This reaction was investigated further with syntheses of 3 more amino acids. Thus, propylacetoacetic ester, b5.5 84°, d416 0.9673, nD16 1.4280, on condensation with Ph diazotate gave 35.4% butyrylformic acid phenylhydrazone, m. 103°, which on reduction gave 77.4% of valine, m. 304-5°. Butylacetoacetic ester, b14 110-13° d416.5 0.9539, nD16.5 1.4292, on condensation with Ph diazotate gave 65% valerylformic acid phenylhydrazone, m. 72-5°, which on reduction gave 88.1% of leucine, m. 294-6°. p-MeOC6H4CH2Cl was condensed with sodioacetoacetic ester to give p-methoxybenzylacetoacetic ester (76%), b3 157-8°, d417.2 1.1033, nD17.2 1.5077; its phenylhydrazone was obtained in 75% yield (isolated in 2 forms: colorless, m. 158-9°, and yellow, m. 150°); reduction of this gave 56.0% p-metoxyphenylalanine, m. 262°; boiling the latter with HI gave 96% tyrosine, m. 309-10°. Benzylacetoacetic ester and isobutylacetoacetic ester used with other diazotized compds. (o- and p-toluidines, m- and p-nitroanilines, sulfanilic acid and 1- and 2-naphthylamines, gave the corresponding hydrazones in 55-75% yields. (No data given.) The formation of pyrazolones by the scheme: EtCO2CH2CH(COMe)CO2Et ArN2OH → ArN:NCH.CO.NAr.N:CCO2Et was used for preparation of a large number of derivs. of this type; thus, using o-toluidine, yellow crystalline product, m. 95-6°; m-toluidine, orange m. 146-7°, p-toluidine, red, m. 143-4°; sulfanilic acid gave the mono-Et ester of tartrazinic acid: sulfanilamide yielded a yellow crystalline product, m. 258-60°; p-nitroaniline, orange, m. 246-8°; naphthionic acid, red infusible product; benzidine, red infusible product. It was also shown that bromotetronic acid condenses with aryl diazotates, to yield directly arylhydrazones (and from these, the bis-hydrazones) of interest in the dyestuff field; thus, the following α-arylazo-β-ketobutyrolactones were prepared: p-nttrophenyl, m. 214° (from AcOH), m-tolyl, m. 172° (from EtOH), 1-naphthyl, m. 148-50° (from AcOH), and 2-naphthyl, m. 212°. It was shown that CH2BrCOCHBrCO2Et with ArN2OH yields: CO.CH2NAr.N:CCO2Et by which scheme there were prepared: α-(1-naphthylazo)-γ-bromoacetoacetic ester, m. 165° (from AcOH), and others (not given). In the field of alicylic esters the most completely investigated material was cyclohexanonecarboxylic ester, b9 104-6°, nD17.5 1.4750, d417.5 1.0741, which by the scheme, CH2.CH2.CH2.CH2.CO.CHCO2Et → Et2CC(:NNHPh)(CH2)4CO2H → HO2CC(:NNHPh)(CH2)4CO2H, yielded, in turn: the phenylhydrazone of mono-Et α-ketopimelate (98%), isolated in 2 forms: m. 89.5-90° and 142-3°; this on hydrolysis gave the phenylhydrazone of the acid, also in 2 forms, m. 144-5° and 131-2°; reduction of the latter gave 66% α-aminopimelic acid, m. 215-16°. From cyclopentanonecarboxylic ester, the corresponding phenyl- and 1-naphthylhydrazones of mono-Et α-ketoadipate phenylhydrazone of α-ketoadipic acid, and α-aminoadipic acid were obtained (no data given). Et camphorcarboxylate, b18 162-3°, d413 1.0646, nD13 1.4767, condensed with Ph diazotate gave the compound C19H24O3N2, m. 62°, readily hydrolyzed to the phenylhydrazone of ketohomocamphoric acid, m. 166°, which on reduction gave α-aminohomocamphoric acid, m. 185°. Insofar as the group CO2Et corresponds to the group CN in condensations with diazo compds., the reaction with aromatic diazo compds. of nitriles of the type R.CO.CHCN was partly investigated and preliminary expts. showed that the nitrile of cyclopentanonecarboxylic acid appears to react according to the following scheme: CH2.CH2.CH2.CO.CHCN - → PhN2OH HO2CCH2CH2CH2C(:NNHPh)CN. The rupture of a C-C bond occurring in

L46 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
reactions of this general type is remarkable particularly because of the mild conditions employed (weakly alk. aq. or dil. alc. soln. at 0°). A suggestion is made as to the mechanism of C-C rupture in biol. processes.

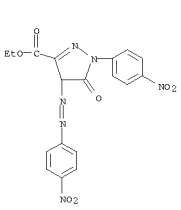
IT 6359-65-5P, 2-Pyrazoline-3-carboxylic acid, 5-oxo-1-p-sulfophenyl-4-p-sulfophenylazo-, ethyl ester, di-Na salt 110032-11-6P, 2-Pyrazoline-3-carboxylic acid, 1-(p-nitrophenyl)-4-(p-nitrophenylazo)-5-oxo-, ethyl ester 858265-49-3P, 2-Pyrazoline-3-carboxylic acid, 5-oxo-1-p-tolyl-4-p-tolylazo- 858265-56-2P, 2-Pyrazoline-3-carboxylic acid, 1-(4'-hydroxy-4-biphenylyl)-4-(4'-hydroxy-4-biphenylylazo)-5-oxo-, ethyl ester
RL: PREP (Preparation)
(preparation of)

RN 6359-65-5 HCAPLUS
CN 1H-Pyrazole-3-carboxylic acid, 4,5-dihydro-5-oxo-1-(4-sulfophenyl)-4-[(4-sulfophenyl)azo]-, 3-ethyl ester, disodium salt (9CI) (CA INDEX NAME)



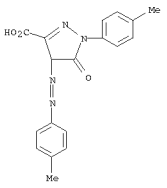
●2 Na

RN 110032-11-6 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-(p-nitrophenyl)-4-(p-nitrophenylazo)-5-oxo-, ethyl ester (6CI) (CA INDEX NAME)

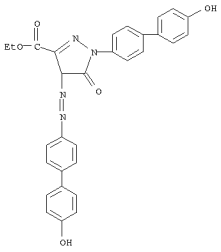


RN 858265-49-3 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 5-oxo-1-p-tolyl-4-p-tolylazo- (4CI) (CA INDEX NAME)

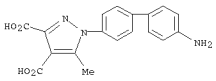
L46 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)



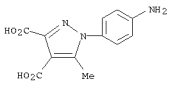
RN 858265-56-2 HCAPLUS
CN 2-Pyrazoline-3-carboxylic acid, 1-(4'-hydroxy-4-biphenylyl)-4-(4'-hydroxy-4-biphenylylazo)-5-oxo-, ethyl ester (4CI) (CA INDEX NAME)



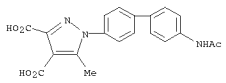
L46 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 861369-86-0 HCAPLUS
CN 3,4-Pyrazoledicarboxylic acid, 1-[p-(p-aminophenyl)phenyl]-5-methyl- (2CI) (CA INDEX NAME)



RN 861585-74-2 HCAPLUS
CN 3,4-Pyrazoledicarboxylic acid, 1-(p-aminophenyl)-5-methyl- (2CI) (CA INDEX NAME)

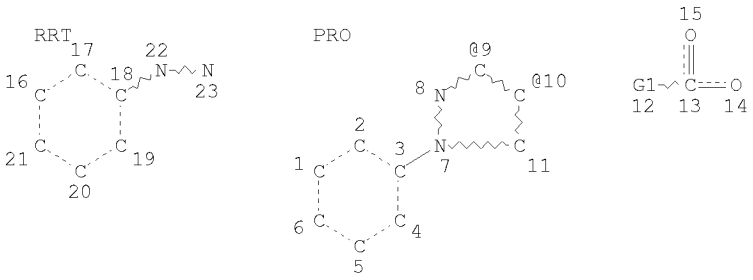


L46 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2007 ACS on STN
AN 1926:4890 HCAPLUS
DN 20:4890
OREF 20:598h-i,599a-c
TI New azo combinations with diacetosuccinic ester and the Billow synthesis of substituted pyrazoles
AU Bulow, C.; Baur, K.
SO Berichte der Deutschen Chemischen Gesellschaft [Abteilung] B: Abhandlungen (1925), 58B, 1926-32
CODEN: BDCBAD; ISSN: 0365-9488
DT Journal
LA Unavailable
GI For diagram(s), see printed CA Issue.
AB cf. Ber. 33, 262(1900); Dimroth, C. A. 3, 439. Di-Et [acetyl-p-phenylenediamine-azo]diacetosuccinate, RN:NCAc(CO2Et)CHAcCO2Et (I, R = AcNHC6H4), from diazotized p-AcNHC6H4NH2 in HCl with (CHAcCO2Et)2 and NaOAc in cold aqueous alc., m. 134°, does not give the Bulow reaction, is easily converted by long standing in alc., by boiling in dilute alc. or AcOH or by fusion into di-Et 5-methyl-1-[p-acetylaminophenyl]pyrazole-3,4-dicarboxylate (best prepared by treating the original coupling mixture directly with steam), m. 158°, which is hydrolyzed by boiling alc. KOH to the free acid, m. 264° (decomposition), can be titrated very accurately, is not precipitated by AcOH from aqueous solns. of the di-K salt; the 1-p-aminophenyl acid, from the above ester with 1:1 HCl, m. 276° (decomposition), is distinctly amphoteric; although it forms no solid HCl salt, its suspensions in mineral acids yield clear diazo solns. (II) which under suitable conditions can be coupled with keto-enol desmotropes of the type of AcCH2CO2Et, yielding with AcCH2CO2Et itself Et[5-methylpyrazole-3,4-dicarboxy-1-p-aniline-azo]acetoacetate, EtO2CCHAcN:NC6H4N<CMe:CCO2H N= =CO2H, yellow, m. 215-6° (decomposition), and with AcCH2CONHPh the corresponding acetoacetanilide, decomps. about 266°, which cannot be titrated and whose C3H3N salt in H2O gives ppts. with metallic salts. Di-Et [5-methylpyrazole-3,4-dicarboxy-1-p-aniline-azo]acetonedicarboxylate, from II and CO(CH2CO2Et)2, yellow hydrated leaflets (1 or 2H3O), m. anhydrous around 140°, yields with alkalies needles, decompose 265°, containing 49.12-49.23% C, 3.89% H and 13.40% N. p-AcNHC0H4NH2, m. 195-6°, is obtained in 57% yield from 25.2 g. com. distilled (C6H4NH2)2 and 14 g. Ac2O in CHCl3 in the cold. Di-Et [N-monoacetylbenzidine-azo]diacclosuccinate, m. 163° (decomposition), does not give the Bulow reaction. Di-Et 5-methyl 1-[p-acetylaminodiphenyl]pyrazole-3,4-dicarboxylate, m. 168°; free acid, m. 285°(decomposition); K H salt, decomps. 325 °; di-K salt; 1-p-aminodiphenyl acid, m. 287° (decomposition). Tetra-Et diacetosuccinate[azobenzidine-azo]diacetosuccinate, from tetrazotized (C6H4NH2)2 and (CHAcCO2Et)2, faintly yellow, m. 152° (decomposition), does not give the Bulow reaction. Tetra-El 1-p-diphenylbis-[5-methylpyrazole-3,4-dicarboxylate], m. 141°; free acid, m. 302° (decomposition); tetra-K salt; di-K salt, does not change up to 350°.
IT 861382-90-3, 3,4-Pyrazoledicarboxylic acid, 1-[p-(p-acetamidophenyl]phenyl]-5-methyl-
(and derivs.)
RN 861382-90-3 HCAPLUS
CN 3,4-Pyrazoledicarboxylic acid, 1-[p-(p-acetamidophenyl)phenyl]-5-methyl- (2CI) (CA INDEX NAME)



IT 861369-86-0P, 3,4-Pyrazoledicarboxylic acid, 1-[p-(p-aminophenyl)phenyl]-5-methyl- 861585-74-2P, 3,4-Pyrazoledicarboxylic acid, 1-(p-aminophenyl)-5-methyl-
RL: PREP (Preparation)
(preparation of)

```
=> b casre

FILE 'CASREACT' ENTERED AT 15:32:19 ON 27 DEC 2007
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.

FILE CONTENT:1840 - 23 Dec 2007 VOL 147 ISS 26

New CAS Information Use Policies, enter HELP USAGETERMS for details.

*************************************************************
*                                                           *
*     CASREACT now has more than 13.8 million reactions     *
*                                                           *
*************************************************************

Some CASREACT records are derived from the ZIC/VINITI database (1974-1999)
provided by InfoChem, INPI data prior to 1986, and Biotransformations
database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance
identification.

=> d que sta l43
L41             STR
```




```
VAR G1=9/10
NODE ATTRIBUTES:
CONNECT IS E3  RC AT   6
CONNECT IS E3  RC AT  11
CONNECT IS E1  RC AT  23
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  23

STEREO ATTRIBUTES: NONE
L43         126 SEA FILE=CASREACT SSS FUL L41 (  1128 REACTIONS)

100.0% DONE   10611 VERIFIED    1128 HIT RXNS                     126 DOCS
SEARCH TIME: 00.00.03


=> d his

     (FILE 'HOME' ENTERED AT 13:41:21 ON 27 DEC 2007)

     FILE 'REGISTRY' ENTERED AT 13:41:30 ON 27 DEC 2007
```

```
                ACT J905C1/A
               ---------
L1              STR
L2       134263 SEA FILE=REGISTRY SSS FUL L1
               ---------
L3              STR L1
L4            5 L3 SAM SUB=L2
L5          882 L3 FULL SUB=L2
                SAV TEM J905C2/A L5

     FILE 'HCAPLUS' ENTERED AT 13:45:32 ON 27 DEC 2007
L6          163 L5
                E SCHADT O/AU
L7           23 E3-4
                E SCHIEMANN K/AU
L8           42 E3-4
                E VAN AMSTERDAM C/AU
L9           53 E3-6
                E BARTOSZYK G/AU
L10         122 E4-8
                E SEYFRIED C/AU
L11         230 E3-6,E12-E14
L12       34803 MERCK/CS,PA
L13           2 L6 AND L7-11
L14           4 L6 AND L12
L15           2 L14 NOT L13
                SEL HIT RN 2

     FILE 'REGISTRY' ENTERED AT 13:48:33 ON 27 DEC 2007
L16          70 E1-70

     FILE 'HCAPLUS' ENTERED AT 13:52:45 ON 27 DEC 2007
L17         161 L6 NOT L13
L18         136 L17 AND PD<=20030308
                SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 13:54:24 ON 27 DEC 2007
L19         385 E1-385
L20        6378 L2 AND (NC4 OR NC2NC2)/ES
L21           2 (PIPERAZINE OR PYRROLIDINE)/CN
L22        5645 (16.136.1 OR 46.383.1)/RID AND L20

     FILE 'HCAPLUS' ENTERED AT 14:35:12 ON 27 DEC 2007
L23        1045 L22
L24         769 L23 AND PD<=20030308
L25           7 L24 AND L18
                SEL HIT RN

     FILE 'REGISTRY' ENTERED AT 14:37:50 ON 27 DEC 2007
L26         116 E386-501
                DEL SEL Y
L27           3 L19 AND (C24H26CLN3O4 OR C26H24N2O2)
L28           2 L26 AND NC2NC2/ES AND 46.156.30/RID
L29           1 C22H24BRN7O AND L28
L30           4 L27,L29

     FILE 'HCAPLUS' ENTERED AT 14:48:07 ON 27 DEC 2007
L31           4 L30

     FILE 'REGISTRY' ENTERED AT 14:49:55 ON 27 DEC 2007
L32             STR L1
L33          50 L32 SAM SUB=L2
L34        8106 L32 FULL SUB=L2
                SAV TEM J905C7/A L34

     FILE 'HCAPLUS' ENTERED AT 14:55:52 ON 27 DEC 2007
L35        4110 L34 AND PD<=20030308
L36          21 L35 AND L18
L37        1082 L35 AND L34 (L)PREP+NT/RL
```

```
L38          17 L18 AND L37

     FILE 'CASREACT' ENTERED AT 15:11:50 ON 27 DEC 2007
L39             STR L32
L40           9 L39
L41             STR L39
L42           6 L41
L43         126 L41 FULL
                SAV TEM J905C8/A L43
L44          80 L43 AND PD<=20030308
L45          46 L43 NOT L44

     FILE 'HCAPLUS' ENTERED AT 15:28:26 ON 27 DEC 2007
L46          18 L31,L38
L47           0 L46 AND L7-11

=>
```